9-9 Tactical Trucks

ITEM: M1114 Up-Armored HMMWV's

SUBJECT: Objective Frag 5 Door and Frag 1A Kit Installation

POC: Mr. Reginald Dixon, AMSTA-LC-CHLB, DSN 786-2795, Commercial (586) 573-2795, or email Reginald.Dixon@tacom.army.mil

COMMENTS: New heavy duty door assemblies and additional perimeter overlay kits have been designed to improve armor capability. Procedures have been developed for installation of these kits.

6434899-01M1

LIST OF EFFECTIVE PAGES

Dates of issue for original and changed pages of this document are:

 Original
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TOTAL NUMBER OF PAGES IN THIS PUBLICATION IS 88 CONSISTING OF THE FOLLOWING:

Page No.*Change No.

A	3
1 - 2	3
4 - 5	1
6	3
7 - 16	1
17 - 24.1	3
25 - 27	1
28	3
29 - 30	1
31 –31.1	3
32 –40	1
41 - 48.1	3
49	1
49.1 – 51.1	3
A1 - A-11	1
B-1 - B-4	1
C-1 - C-3	2
D-1 – D-6	3

^{*}Zero in this column indicates original page.

MATERIALS/PARTS:

NSN (PART NUMBER)	NOMENCLATURE	QTY
(6435667-01M1) Green 383 or	Kit, Field Installation, Frag 5 Door-	1
(6435667-200M1) Tan 686A	Objective	
Consisting of:		
(6435148-01M1) Green 383 or	Plate, B Pillar-Left	1
(6435148-200M1) Tan 686A		
(6435220-01M1) Green 383 or	Plate, B Pillar-Right	1
(6435220-200M1) Tan 686A		
(6435620-01M1) Green 383 or	Plate, B Pillar, Deflector-Left	1
(6435620-200M1) Tan 686A		
(6435621-01M1) Green 383 or	Plate, B Pillar, Deflector-Right	1
(6435621-200M1) Tan 686A		
(6435350-01M1) Green 383 or	Plate, Washer, B Pillar	2
(6435350-200M1) Tan 686A		
(6435490-01M1)	Plate, Washer, B Pillar-Upper	2
(6435630-01M1)	Plate, Nut, B Pillar-Lower	2
(6435293-01M1)	Ramp, Latch-B Pillar-Lower	2
(6437133-01M1)	Guide, Door-Male	4
(6435228-01M1)	Mount, Door Guide-Front	2
(6435292-01M1)	Ramp, Latch-B Pillar-Upper	2
(6435193-01M1)	Subassembly, Bracket, Turret Support	1
,	Tube-Left	
(6435218-01M1)	Subassembly, Bracket, Turret Support	1
,	Tube-Right	
(6435090-01M1) Green 383 or	Assembly, Door, Front-Left	1
(6435090-200M1) Tan 686A		
(6435095-01M1) Green 383 or	Assembly, Door, Rear-Left	1
(6435095-200M1) Tan 686A		
(6435211-01M1) Green 383 or	Assembly, Door, Front-Right	1
(6435211-200M1) Tan 686A		
(6435264-01M1) Green 383 or	Assembly, Door, Rear-Right	1
(6435264-200M1) Tan 686A		
(6435652-01M1)	Bracket, Safety Strap	4
(6435651-01M1)	Bracket, Safety Strap, A-Pillar-Left	1
(6435651-02M1)	Bracket, Safety Strap, A-Pillar-Right	1
(6435659-01M1)	Ramp, Latch, Rear Door, Lower-Left	1
(6435669-01M1)	Ramp, Latch, Rear Door, Lower-Right	1
(6435658-01M1)	Base, Latch Ramp, Rear Door, Lower-	1
,	Left	
(6435668-01M1)	Base, Latch Ramp, Rear Door, Lower-	1
,	Right	

MATERIALS/PARTS (Cont'd):		
NSN (PART NUMBER)	NOMENCLATURE	QTY
(6435680-01M1)	Weldment, Door Guide Support-Left	1
(6435679-01M1)	Weldment, Door Guide Support-Right	1
(6437172-01M1)	Weatherseal, Door Trim	4
(6435262-01M1)	Strap, Door-Rear	2
(6435235-01M1)	Plate, Nut, B Pillar	2
(6435623-01M1)	Ramp, Latch, Rear Door, Upper Left	1
(6435624-01M1)	Ramp, Latch, Rear Door, Upper Right	1
(6435094-01M1)	Hinge, Door-Left Side	2
(6435234-01M1)	Hinge, Door-Right Side	2
(6435491-01M1)	Mount, Door Guide, C Pillar-Left	1
(6435676-01M1)	Mount, Door Guide, C-Pillar-Right	1
(6435678-01M1)	Bracket, Fire Sensor-Left	1
(6435677-01M1)	Bracket, Fire Sensor-Right	1
5340-01-417-6474 (4668245-000)	Strap, Door Check-Front	2
(6434899-01M1)	EIR Digest Article-Kit Installation	1
(6435693-01M1)	Hardware Kit, Frag 5 Objective-Left	1
	Side	
Consisting of:		
5306-01-436-5392 (4397000-010)	Screw, Cap Hex Hd, .250-20 X 1.25	2
5305-01-530-4758 (4397000-032)	Screw, Cap Hex Hd, .312-18 X .750	2
5305-01-428-9197 (4397000-033)	Screw, Cap Hex Hd, .312-18 X .875	2
5305-01-420-6637 (4397000-034)	Screw, Cap Hex Hd, .312-18 X 1.00	10
5306-01-433-9183 (4397000-036)	Screw, Cap Hex Hd, .312-18 X 1.25	6
5306-01-433-9213 (4397000-038)	Screw, Cap Hex Hd, .312-18 X 1.50	2
(4397000-039)	Screw, Cap Hex Hd, .312-18 X 1.75	2
5305-01-428-2938 (4397000-040)	Screw, Cap Hex Hd, .312-18 X 2.00	3
5305-01-530-5159 (4397000-041)	Screw, Cap Hex Hd, .312-18 X 2.25	6
(4397000-044)	Screw, Cap Hex Hd, .312-18 X 3.00	2
(4397000-046)	Screw, Cap Hex Hd, .312-18 X 3.50	2
(4397000-050)	Screw, Cap Hex Hd, .312-18 X 4.50	2
(4397000-052)	Screw, Cap Hex Hd, .312-18 X 5.00	2
5306-01-433-9196 (4397000-060)	Screw, Cap Hex Hd, .375-16 X 1.00	23
5305-01-436-6376 (4397000-067)	Screw, Cap Hex Hd, .375-16 X 2.25	7
5305-00-990-8632 (4397000-073)	Screw, Cap Hex Hd, .375-16 X 3.75	10
5310-01-433-0941 (4397004-006)	Washer, Lock, .250	2
5310-01-417-9942 (4397004-007)	Washer, Lock, .312	13
5340-01-417-8995 (4397005-011)	Washer, Flat, .250 USS	4
5310-01-422-9287 (4397005-012)	Washer, Flat, .312 SAE	2
5310-01-436-3741 (4397005-013)	Washer, Flat312 USS	35
5310-01-436-3742 (4397005-015)	Washer, Flat375 USS	44
4397018-096)	Screw, Mach Button Hd, .250-20 X	2
	1.75	

NSN (PART NUMBER)	NOMENCLATURE	QTY
(4397025-026)	Pin, Dowel-Steel, .1875 X .750	4
(4397031-089)	Screw, Socket Flat Countersink, .250-	8
	20 X .500	
5310-01-439-8173 (4397064-001)	Nut, Hex Locking, .250-20	2
5310-01-439-8172 (4397064-003)	Nut, Hex Locking, .312-18	23
5310-01-439-8177 (4397064-005)	Nut, Hex Locking, .375-16	24
(6430528-05M1)	Washer, Lock-External Serrated	1
(6435694-01M1)	Hardware Kit, Frag 5 Objective-Right Side	1
Consisting of:	Side	
5306-01-436-5392 (4397000-010)	Screw, Cap Hex Hd, .250-20 X 1.25	2
5305-01-530-4758 (4397000-032)	Screw, Cap Hex Hd, .312-18 X .750	2
5305-01-428-9197 (4397000-033)	Screw, Cap Hex Hd, .312-18 X .875	2
5305-01-420-6637 (4397000-034)	Screw, Cap Hex Hd, .312-18 X 1.00	10
5306-01-433-9183 (4397000-036)	Screw, Cap Hex Hd, .312-18 X 1.25	4
5306-01-433-9213 (4397000-038)	Screw, Cap Hex Hd, .312-18 X 1.50	2
(4397000-039)	Screw, Cap Hex Hd, .312-18 X 1.75	2
5305-01-428-2938 (4397000-040)	Screw, Cap Hex Hd, .312-18 X 2.00	3
5305-01-530-5159 (4397000-041)	Screw, Cap Hex Hd, .312-18 X 2.25	6
(4397000-044)	Screw, Cap Hex Hd, .312-18 X 3.00	2
(4397000-046)	Screw, Cap Hex Hd, .312-18 X 3.50	2
(4397000-050)	Screw, Cap Hex Hd, .312-18 X 4.50	2
(4397000-052)	Screw, Cap Hex Hd, .312-18 X 5.00	2
5306-01-433-9196 (4397000-060)	Screw, Cap Hex Hd, .375-16 X 1.00	23
5305-01-436-6376 (4397000-067)	Screw, Cap Hex Hd, .375-16 X 2.25	7
5305-00-990-8632 (4397000-073)	Screw, Cap Hex Hd, .375-16 X 3.75	10
5310-01-433-0941 (4397004-006)	Washer, Lock, .250	2
5310-01-417-9942 (4397004-007)	Washer, Lock, .312	13
5340-01-417-8995 (4397005-011)	Washer, Flat, .250 USS	4
5310-01-422-9287 (4397005-012)	Washer, Flat, .312 SAE	2
5310-01-436-3741 (4397005-013)	Washer, Flat312 USS	35
5310-01-436-3742 (4397005-015)	Washer, Flat375 USS	44
4397018-096)	Screw, Mach Butn Hd, .250-20 X 1.75	2
(4397025-026)	Pin, Dowel-Steel, .1875 X .750	4
(4397031-089)	Screw, Socket Flat Countersink, .250-20 X .500	8
5310-01-439-8173 (4397064-001)	Nut, Hex Locking, .250-20	2
5310-01-439-8172 (4397064-003)	Nut, Hex Locking, .312-18	23
5310-01-439-8177 (4397064-005)	Nut, Hex Locking, .375-16	24
5320-01-529-9455 (4397081-009)	Rivet, .1875	2
(4397025-026)	Pin, Dowel-Steel, .1875 X .750	4

MATERIALS/PARTS (Cont'd): NSN (PART NUMBER)	NOMENCLATURE	QTY
(6430528-05M1)	Washer, Lock-External Serrated	1
(6435695-01M1)	Shim Kit, Frag 5 Objective-Left Side	1
Consisting of:	,,,,,,,, .	
(6435263-01M1)	Shim, Handle, Side Light	2
(6435324-01M1)	Shim, Door Guide, Front-16 Ga	2
(6435324-02M1)	Shim, Door Guide, Front-20 Ga	2
(6435324-03M1)	Shim, Door Guide, Front-22 Ga	2
(6435341-01M1)	Shim, Latch-11 Ga	2
(6435341-02M1)	Shim, Latch-16 Ga	2
(6435341-03M1)	Shim, Latch-20 Ga	2
(6435342-01M1)	Shim, Door Guide, Rear-11 Ga	2
(6435342-02M1)	Shim, Door Guide, Rear-16 Ga	2
(6435342-03M1)	Shim, Door Guide, Rear-20 Ga	2
(6435395-01M1)	Shim, Rear Door Ramp-16 Ga	2
(6435395-02M1)	Shim, Rear Door Ramp-20 Ga	2
(6435395-03M1)	Shim, Rear Door Ramp-22 Ga	2
5365-01-524-8800 (4668621-002)	Shim, Front Latch	2
(6435292-01M1)	Ramp. Latch, B Pillar-Upper	2
(6435696-01M1)	Shim Kit, Frag 5 Objective-Right Side	1
Consisting of:		
(6435263-01M1)	Shim, Handle, Side Light	2
(6435324-01M1)	Shim, Door Guide, Front-16 Ga	2
(6435324-02M1)	Shim, Door Guide, Front-20 Ga	2
(6435324-03M1)	Shim, Door Guide, Front-22 Ga	2
(6435341-01M1)	Shim, Latch-11 Ga	2
(6435341-02M1)	Shim, Latch-16 Ga	2
(6435341-03M1)	Shim, Latch-20 Ga	2
(6435342-01M1)	Shim, Door Guide, Rear-11 Ga	2
(6435342-02M1)	Shim, Door Guide, Rear-16 Ga	2
(6435342-03M1)	Shim, Door Guide, Rear-20 Ga	2
(6435395-01M1)	Shim, Rear Door Ramp-16 Ga	2
(6435395-02M1)	Shim, Rear Door Ramp-20 Ga	2
(6435395-03M1)	Shim, Rear Door Ramp-22 Ga	2
5365-01-524-8800 (4668621-002)	Shim, Front Latch	2
(6435292-01M1)	Ramp, Latch, B Pillar-Upper	2
(6435231-01M1) Green 383 or	Kit, Frag 1A Field Installation	1
(6435231-200M1) Tan 686A		
Consisting of:		
(6435007-01M1) Green 383 or	Rocker Panel Right, IED Overlay	1
(6435007-200M1) Tan 686A		
(6435008-01M1) Green 383 or	Rocker Panel Left, IED Overlay	1
(6435008-200M1) Tan 686A		

NSN (PART NUMBER)	NOMENCLATURE	QTY
(6435010-01M1) Green 383 or	A Pillar Panel Left Hand Overlay	1
(6435010-200M1) Tan 686A		
(6435011-01M1) Green 383 or	A Pillar Panel Right Hand Overlay	1
(6435011-200M1) Tan 686A		
(6435012-01M1) Green 383 or	A-pillar Panel Upper Right Overlay	1
(6435012-200M1) Tan 686A		
(6435013-01M1) Green 383 or	Cover, Breather	1
(6435013-200M1) Tan 686A		
(6435015-01M1) Green 383 or	C Pillar Panel LH, Lower, Overlay	1
(6435015-200M1) Tan 686A		
(6435016-01M1) Green 383 or	Fuel Door Panel, IED Overlay	1
(6435016-200M1) Tan 686A		
(6435017-01M1) Green 383 or	Header Panel, Front Door, IED Overlay	2
(6435017-200M1) Tan 686A		
(6435222-01M1) Green 383 or	Upper C Pillar Panel LH Overlay	1
(6435222-200M1) Tan 686A		
(6435223-01M1) Green 383 or	Upper C Pillar Panel RH Overlay	1
(6435223-200M1) Tan 686A		
(6435224-01M1) Green 383 or	Underbody Right A Pillar Overlay	1
(6435224-200M1) Tan 686A		
(6435225-01M1) Green 383 or	Underbody Left A Pillar Overlay	1
(6435225-200M1) Tan 686A		
(6435489-01M1) Green 383 or	Bracket, Mirror-Upper, RH	1
(6435489-200M1) Tan 686A		
(6435019-01M1) Green 383 or	Bracket, Mirror-Lower, RH	1
(6435019-200M1) Tan 686A		
(6435232-01M1)	Kit, Hardware, Frag 1A Field	1
	Installation	
Consisting of:		
(DY802-32664)	Drill Bit, Armor-Cut, 0.406 DIA	1
(600-2-5036)	Cutting Oil, Spray Can	1
5306-01-420-6635 (4397000-012)	Screw, Cap Hex Hd, .250-20 X 1.50	11
5306-01-433-9187 (4397000-015)	Screw, Cap Hex Hd, .250-20 X 2.25	5
(4397000-016)	Screw, Cap Hex Hd, .250-20 X 2.50	2
(4397000-020)	Screw, Cap Hex Hd, .250-20 X 3.50	11
5305-01-420-6637 (4397000-034)	Screw, Cap Hex Hd, .312-18 X 1.00	1
5306-01-433-9213 (4397000-038)	Screw, Cap Hex Hd, .312-18 X 1.50	1
5305-01-428-2938 (4397000-040)	Screw, Cap Hex Hd, .312-18 X 2.00	2
5305-01-530-5159 (4397000-041)	Screw, Cap Hex Hd, .312-18 X 2.25	2
5305-01-436-6375 (4397000-068)	Screw, Cap Hex Hd, .375-16 X 2.50	4
(4397000-069)	Screw, Cap Hex Hd, .375-16 X 2.75	29

NSN (PART NUMBER)	NOMENCLATURE	QTY
5306-01-446-4661 (4397000-070)	Screw, Cap Hex Hd, .375-16 X 3.00	1
5305-01-475-0404 (4397000-072)	Screw, Cap Hex Hd, .375-16 X 3.50	1
(4397000-077)	Screw, Cap Hex Hd, .374-16 X 4.75	6
5310-01-435-7784 (4397005-010)	Washer, Flat, .250 SAE	29
5340-01-417-8995 (4397005-011)	Washer, Flat, .250 USS	12
5310-01-422-9287 (4397005-012)	Washer, Flat, .312 SAE	2
5310-01-436-3741 (4397005-013)	Washer, Flat, .312 USS	4
5310-01-419-2413 (4397005-014)	Washer, Flat, .375 SAE	44
5310-01-436-3742 (4397005-015)	Washer, Flat, .375 USS	5
5310-01-439-8181 (4397083-001)	Washer, Flat Aluminum	18
5310-01-439-8173 (4397064-001)	Nut, Hex Locking, .250-20	19
5310-01-439-8172 (4397064-003)	Nut, Hex Locking, .312-18	1
5310-01-439-8177 (4397064-005)	Nut, Hex Locking, .375-16	33
(4397001-072)	Screw, Cap Hex Hd, .375-24 X 3.50	4
(4397001-073)	Screw, Cap Hex Hd, .375-24 X 3.75	4
(4397064-006)	Nut, Hex Locking, .375-24	8
(4397000-014)	Screw, Cap Hex Hd, .250-20 X 2.00	4
(4397000-008)	Screw, Cap Hex Hd, .250-20 X 1.00	2
(57K4750)	Kit, Reinforcement	1
(2006065-1)	Kit, Koch FK5 Bracket	1

PROCEDURES:

A. Prepare vehicle as follows:

1. Apply vehicle parking brake. (Refer to TM 9-2320-387-10.)

- 2. Remove companion seat assembly. (Refer to TM 9-2320-387-10.)
- 3. Disconnect battery ground cables. (Refer to TM 9-2320-387-24-1.)

WARNING

Ensure vehicle fire suppression system is deactivated by removing plug from system control box. Failure to do so may cause injury to personnel or damage to equipment.

NOTE

If vehicle is not equipped with an IED aluminum overlay kit, order and install Kit, Field Installation IED Aluminum Overlay. Part number 6433312-01M1 (Green 383) or 6433312-200M1 (Tan 686A).

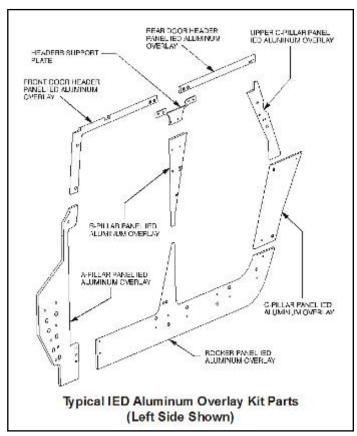


Figure 1.

4. Visually inspect vehicle to verify if IED aluminum overlay kit has been installed. Refer to figure 1. If IED aluminum overlay kit has been installed, continue to next step. Do not continue this procedure if IED aluminum overlays are not installed.

NOTE

If vehicle is not equipped with latest occupant restraint system, order and install Installation Kit, Part number 2005160-3.

- 5. Visually inspect vehicle seat belt buckle assemblies to determine if latest occupant restraint system has been installed. Refer to figure 2a. Do not continue this procedure if the latest occupant restraint system is not installed.
- 6. Remove left and right side rearview mirrors. (Refer to TM 9-2320-387-24-2.) Discard all fasteners and retain mirrors for assembly.

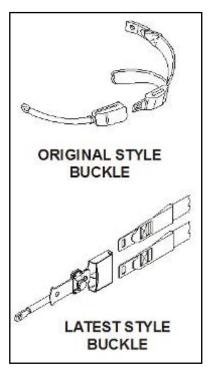


Figure 2a.

- 7. Remove driver's side rearview mirror bracket. (Refer to TM 9-2320-387-24-2.) Retain front capscrew and washer and discard all other parts. Apply 8030-01-025-1692 sealing compound to threads of front capscrew. Install front capscrew and washer and tighten front capscrew to 6 lb-ft (8 N·m).
- 8. Remove fire extinguisher. (Refer to TM 9-2320-387-10.)
- 9. Remove left and right side passenger seats. (Refer to TM 9-2320-387-24-2.)
- 10. Adjust driver's seat to full forward position. (Refer to TM 9-2320-387-10.)
- 11. Remove front doors with hinges from vehicle A-pillars. (Refer to TM 9-2320-387-24-2.) Discard all fasteners.
- 12. Remove rear doors with hinges from vehicle B-pillars. (Refer to TM 9-2320-387-24-2.) Discard all fasteners.
- 13. Remove left and right side rear door strikers. (Refer to TM 9-2320-387-24-2.) Discard all parts.
- 14. Remove two locknuts (3), capscrews (1), and lower rear ramp block (2) as shown in figure 2b. Discard all parts. Repeat procedure for opposite side of vehicle.

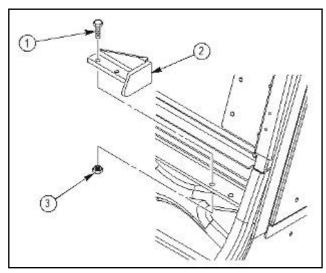


Figure 2b.

Do not remove rear door safety strap bracket capscrews from B-pillars.

- 15. Remove left and right side front door strikers and rear door safety strap brackets. (Refer to TM 9-2320-387-24-2.) Retain front door striker spacers and discard all other parts.
- 16. Remove left and right side door check straps and mounting brackets from windshield. (Refer to TM 9-2320-387-24-2.) Retain nut plates and discard all other parts.
- 17. Remove left and right side plates from cargo shells to gain access to C-pillar top armor capscrews and locknuts. (Refer to TM 9-2320-387-24-2.) Retain all parts.
- 18. Remove fuel filler housing. (Refer to TM 9-2320-387-24-2.) Replace all locking fasteners and retain all other parts for installation.

- 19. Remove fuel door catch. (Refer to TM 9-2320-387-24-2.) Retain fuel door catch.
- 20. If vehicle is so equipped, remove right rear door striker reinforcement. (Refer to TM 9-2320-387-24-2.) Discard all parts.
- 21. Remove access hole cover plate. (Refer to TM 9-2320-387-24-2.) Retain all parts.
- 22. Remove left rear HVAC lines cover. (Refer to TM 9-2320-387-24-2.) Retain cover and discard all fasteners.
- 23. If vehicle is so equipped, remove left rear door striker reinforcement. (Refer to TM 9-2320-387-24-2.) Discard all parts.
- 24. Remove A/C supply vents and screen. (Refer to TM 9-2320-387-24-2.) Replace lockwashers and retain all other parts for installation.
- B. Remove left and right side upper C-pillar panel aluminum overlays as follows:

Removal of left and right side upper C-pillar panel aluminum overlays is basically the same. This procedure covers the left side.

- 1. Remove two locknuts (18), four washers (3), two capscrews (4), and upper C-pillar panel aluminum overlay (2) from C-pillar armor (1) as shown in figure 3a. Discard all parts, including any old shims located behind upper C-pillar armor (1).
- 2. Repeat step B.1. for right side.

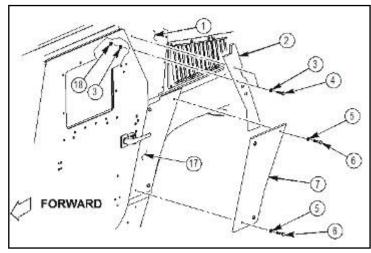


Figure 3a.

- C. Remove two capscrews (6), washers (5), and C-pillar panel aluminum overlay (7) from left side lower C-pillar armor (17) as shown in figure 3a. Discard all parts.
- D. Remove left and right side door header aluminum overlays as follows:

Removal of left and right side door header aluminum overlays is basically the same. This procedure covers the left side.

- 1. Remove two locknuts (16), washers (15), and capscrews (12) from door header aluminum overlay assembly (11) as shown in figure 3b. Discard all fasteners.
- 2. Remove capscrew (10) and washer (9) from door header aluminum overlay assembly (11) as shown in figure 2b. Discord all factors

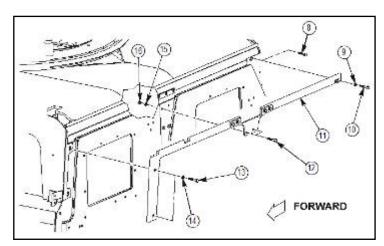


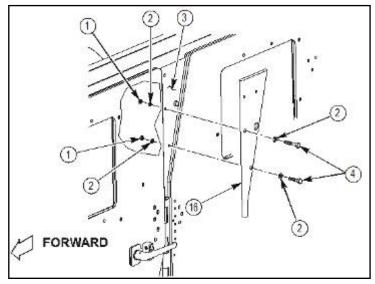
Figure 3b.

- figure 3b. Discard all fasteners.
- 3. Remove two capscrews (13), washers (14), and door header aluminum overlay assembly (11) from vehicle as shown in figure 3b. Discard all parts.
- 4. Apply 8030-01-025-1692 sealing compound to threads of 4397000-008 capscrew (8) and install capscrew (8) as shown in figure 3b. Tighten capscrew (8) to 6 lb-ft (8 $N \cdot m$).
- 5. Repeat steps D.1. through D.4. for right side.
- E. Remove left and right side B-pillar aluminum overlays as follows:

NOTE

Removal of left and right side B-pillar aluminum overlays is basically the same. This procedure covers the left side.

1. Remove two locknuts (1), four washers (2), two capscrews (4), and B-pillar aluminum overlay (16) from vehicle B-pillar (3) as shown in figure 4a. Discard all parts.



2. Repeat step E.1. for right side.

Figure 4a.

- F. Remove and modify left side rocker panel aluminum overlay as follows:
 - 1. Remove three capscrews (10) from forward mounting holes in A-pillar to rocker gap plate (11) as shown in figure 4b. Discard capscrews (10).
 - 2. Remove two locknuts (14), washers (13), capscrews (9), and A-pillar to rocker gap plate (11) as shown in figure 4. Retain gap plate (11) and discard all fasteners.

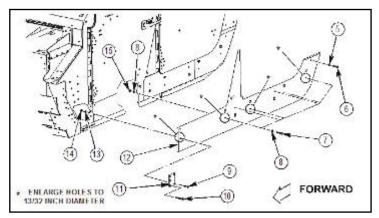


Figure 4b.

- 3. Remove capscrew (6) and washer (5) as shown in figure 4b. Discard all fasteners.
- 4. Remove six locknuts (15), twelve washers (8), six capscrews (7), and left side rocker panel aluminum overlay (12) as shown in figure 4b. Retain left side rocker panel aluminum overlay (12) and discard all fasteners.
- 5. Enlarge four mounting holes in left side rocker panel aluminum overlay (12) to 13/32 inch using a regular drill bit. Refer to figure 4b.
- 6. Repair finish all surfaces that have been cut, ground, or drilled using appropriate primer per MIL-C-53072.
- G. Remove and modify right side rocker panel aluminum overlay as follows:
 - 1. Remove three capscrews (8) from forward mounting holes in A-pillar to rocker gap plate (7) as shown in figure 5a. Discard capscrews (8).
 - 2. Remove two locknuts (5), washers (6), capscrews (21), and A-pillar to rocker gap plate (7) as shown in figure 5a. Retain gap plate (7) and discard all fasteners.
 - 3. Remove capscrew (1) and washer (2) as shown in figure 5a. Discard all fasteners.

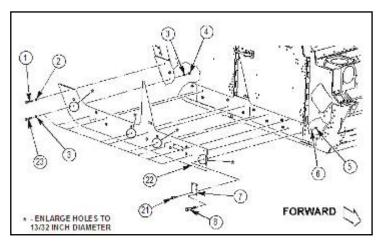


Figure 5a.

- 4. Remove nine locknuts (4), eighteen washers (3), nine capscrews (23), and right side rocker panel aluminum overlay (22) as shown in figure 5a. Retain right side rocker panel aluminum overlay (22) and discard all fasteners.
- 5. Enlarge four mounting holes in right side rocker panel aluminum overlay (22) to 13/32 inch using a regular drill bit. Refer to figure 5a.
- 6. Repair finish all surfaces that have been cut, ground, or drilled using appropriate primer per MIL-C-53072.
- H. Remove B-pillar armor, B-pillar backup armor, and spacer from both sides of vehicle. (Refer to TM 9-
 - 2320-387-24-2.) Retain all shims and rifle mount and discard all other parts.
- I. Remove two screws (20), front lower ramp block (18), and front lower ramp block spacer (17) from B-pillar sail panel (19) as shown in figure 5b.
 Repeat procedure for opposite side of vehicle.
 Discard all parts.
- J. Remove locknut (12), two washers (13 and 15), shoulder bolt (16), seat belt D-ring (9), and B-pillar support bracket (11) from B-pillar support tube (14) as shown in figure 5c. Discard washer (13) and temporarily reinstall seat belt D-ring (9) with shoulder bolt (16), washer (15), and locknut (12) to ensure D-ring mounting bracket (10) remains in place. Hand tighten locknut (12) Repeat procedure for opposite side of vehicle.
- K. Remove right front lower seat belt bracket from B-pillar. Leave three point seat belt installed on bracket. (Refer to TM 9-2320-387-24-2.) Retain all parts.
- L. Remove four capscrews (8), washers (7), seat belt protector plate (6), and left front lower seat belt bracket (2) from vehicle B-pillar (3) as shown in figure 6a. Leave three point seat belt (1) installed on bracket (2). Retain all parts.
- M. Remove hat sections from B-pillars as follows:

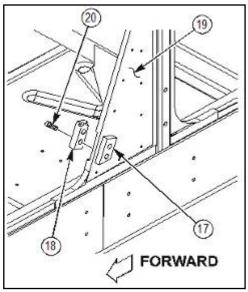


Figure 5b.

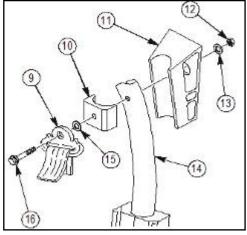


Figure 5c.

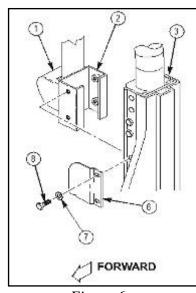


Figure 6a. 6434899-01M1

Removal of left and right side B-pillar hat sections is basically the same. This procedure covers the left side.

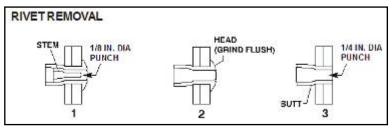


Figure 6b.

1. Punch out stems, grind heads, and punch 26 rivet butts (5) through B-pillar hat section (4) and vehicle B-pillar (3). Refer to figure 6b.

CAUTION

B-pillar hat section is glued to vehicle B-pillar and sail panel. Use caution when separating B-pillar hat section from vehicle B-pillar and sail panel. Remove only the B-pillar hat section. Failure to do so may result in damage to equipment.

- 2. Remove B-pillar hat section (4) from vehicle B-pillar (3) and sail panel (9), then remove old adhesive and rivets (5) from vehicle B-pillar (3). Vehicle B-pillar (3) must be flat and smooth. Refer to figure 6c.
- 3. Repair finish all surfaces that have been cut, ground, or drilled using appropriate primer per MIL-C-53072.
- 4. Repeat steps M.1 through M.3. for right side
- N. Remove capscrew (5), washer (6), and front seat belt with bracket (7) from bracket (1) at B-pillar sail panel (2) as shown in figure 7a. Repeat procedure for opposite side of vehicle. Discard capscrews (5) and washers (6).
- O. Remove material from left and right side B-pillar sail panels as follows:

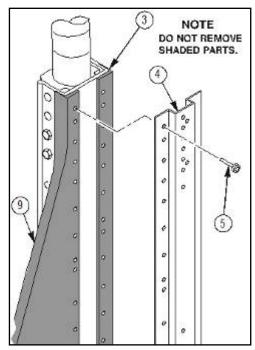


Figure 6c.

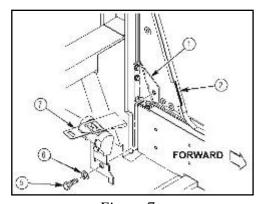


Figure 7a.

NOTE

Removal of material from left and right side B-pillar sail panels is basically the same. This procedure covers the left side.

- 1. Install M00629BAS001-01M1 sail plate/B-post cutout template (4) on Bpillar sail panel (2) as shown in figure 7b, and mark area to be removed. Remove template (4).
- 2. Clamp top of B-pillar sail panel (2) to vehicle B-pillar (3) to prevent B-pillar sail panel (2) from vibrating loose during material removal. Refer to figure 7b.

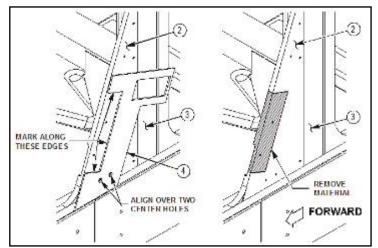


Figure 7b.

- 3. Remove material from B-pillar sail panel (2) as shown in figure 7b.
- 4. Deburr edges and repair finish all surfaces that have been cut, ground, or drilled using appropriate primer per MIL-C-53072.
- 5. Repeat steps O.1. through O.4. for right side.
- P. Remove right rear rifle support. (Refer to TM 9-2320-387-24-2.) Retain all parts.
- Q. Remove material from left and right side B-beams as follows:

Removal of material from left and right side B-beams is basically the same. This procedure covers the left side.

1. Place M00629BAS001-01M1 sail plate/B-post cutout template (2) on B-beam (1) as shown in figure 8a, and mark area to be removed. Remove template (2).

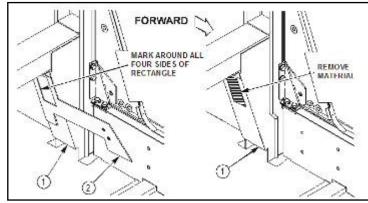


Figure 8a.

- 2. Remove material from B-beam (1) as shown in figure 8a.
- 3. Deburr edges and repair finish all surfaces that have been cut, ground, or drilled using appropriate primer per MIL-C-53072.

- 4. Repeat steps Q.1. through Q.3. for right side.
- R. Remove capscrew (5), washer (4), and rear seat belt with bracket (6) from vehicle mounting bracket (3) as shown in figure 8b. Repeat procedure for opposite side of vehicle. Discard capscrews (5) and washers (4).
- S. Remove material from left and right side rear door flanges as follows:

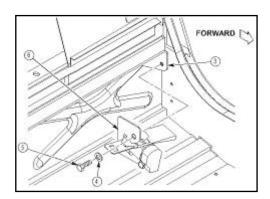


Figure 8b.

Removal of material from left and right side rear door flanges is basically the same. This procedure covers the left side.

1. Place M00630BAS001-01M1 rear ramp cutout template (4) on rear door flange (1) as shown in figure 9a, and mark area to be removed. Remove template (4).

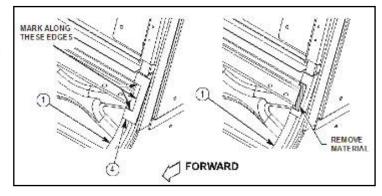


Figure 9a.

- 2. Remove material from rear door flange (1) as shown in figure 9a.
- 3. Deburr edges and repair finish all surfaces that have been cut, ground, or drilled using appropriate primer per MIL-C-53072.
- 4. Repeat steps S.1. through S.3. for right side.
- T. Enlarge specified holes in A-pillar to rocker gap plates and rocker panels as follows:

ENLARGE HOLES TO 13 32 INCH DIAMETER USING MAG BRILL WITH MINOR-CUT DRILL BIT AND 690-2-8036 CUTTING OIL

Figure 9b.

CAUTION

The armor-cut drill bit is very fragile. Bumping or dropping could cause damage to drill bit. Do not remove wax coating from cutting tip of drill bit until ready to drill. Lubricate drill bit with cutting oil during drilling.

- 1. Install DY802-32664 armor-cut drill bit into mag drill.
- 2. Enlarge one mounting hole in each existing A-pillar to rocker gap plate (2 and 3) to 13/32 inch diameter, using mag drill with armor-cut drill bit and 600-2-5036 cutting oil. Refer to figure 9b.

- 3. Attach mag drill (4) to left side rocker panel armor (2) and align with one of the specified hole locations. Refer to figure 10a.
- 4. Install C-clamp (5) to prevent mag drill (4) from slipping. Refer to figure 10a.
- 5. Drill 13/32 inch diameter hole through left side rocker panel armor (2) and inner liner (1) using mag drill (4) with armorcut drill bit and 600-2-5036 cutting oil. Refer to figure 10a.
- 6. Remove C-clamp (5) and mag drill (4), and repeat procedure for three remaining specified holes in left side rocker panel armor (2), and four specified holes in right side rocker panel armor (3). Refer to figure 10b.
- 7. Repair finish all surfaces that have been drilled using appropriate primer per MIL-C-53072.
- U. Install left side B-pillar and related parts as follows:

WARNING

Vehicle roof must be supported during installation of B-pillars and doors. Failure to do so may cause injury to personnel or damage to equipment.

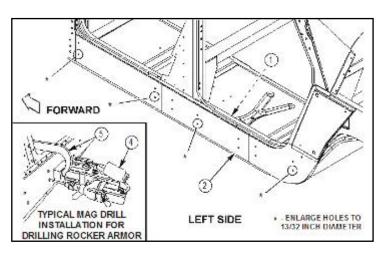


Figure 10a.

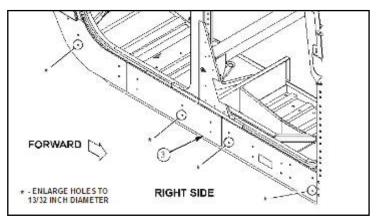


Figure 10b.

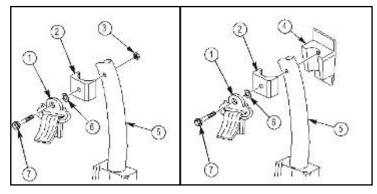


Figure 11a.

1. Remove existing locknut (3), shoulder bolt (7), washer (6), and seat belt D-ring (1) from turret support tube (5) as shown in figure 11a. Discard locknut (3).

- 2. Ensure D-ring mounting bracket (2) is in mounting position, and install 6435193-01M1 left turret support tube bracket subassembly (4) and existing seat belt Dring (1) with existing washer (6) and shoulder bolt (7) as shown in figure 11a. Hand tighten shoulder bolt (7) until snug.
- 3. Loosen three capscrews (9) securing B-pillar support tube (5) to turret support assembly (8) as shown in figure 11b.
- 4. Remove two screws (11), locknuts (16), serrated washers (17), and fire sensor (12) from existing fire sensor bracket (15) as shown in figure 11c. Retain all parts.
- 5. Remove and retain existing clamp (10) from existing fire sensor bracket (15) and B-pillar support tube (5). Refer to figure 11c.
- 6. Install existing clamp (10) through 6435678-01M1 left fire sensor bracket (13), and around B-pillar support tube (5). Do not tighten clamp (10) at this time. Refer to figure 11c.
- 7. Install fire sensor (12) on left fire sensor bracket (13) with two existing screws (11), serrated washers (17), and locknuts (14) as shown in figure 11c. Tighten locknuts (14).

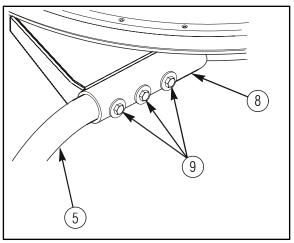


Figure 11b.

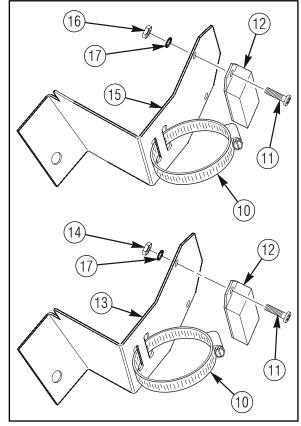


Figure 11c.

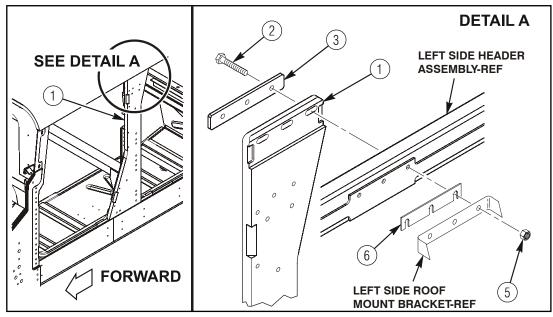


Figure 12a.

Shim B-pillars, only as required. Replacing the exact number of shims removed is not necessary. In some cases, no shims are necessary. On severely tweaked, high mileage vehicles loosening and repositioning the roof may be required.

8. Install 6435148-01M1 or 6435148-200M1 left B-pillar plate (1) with three 4397000-041 capscrews (2), one 6435490-01M1 B-pillar upper washer plate (3), and three 4397064-003 locknuts (5) as shown in figure 12a. Install existing shims (6) as required, and hand tighten locknuts (5).

- 9. Refer to step CC. for header panel inspection and adjustment.
- 10. Install one M00650BAS00101M1 B-pillar spacer gage (7)
 on A-pillar (9) with existing
 front door mounting capscrew
 (8) (.375-16 X 3.50) as shown
 in figure 12b or two
 M00631BAS001-01M1 Bpillar spacer gages (7) on Apillar (9) with two existing
 front door mounting capscrews
 (8) (.375-16 X 3.50) as shown
 in figure 12c. Ensure back
 edge of left B-pillar plate (1) is tight against

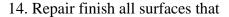
FORWARD

9
8
0
7

Figure 12b.

B-pillar spacer gages (7), and tighten three capscrews (item 2 figure 12a) to 21 lb-ft (28.5 N·m). Remove capscrews (8) and B-pillar spacer gages (7).

- 11. Clamp left B-pillar plate (4) to vehicle B-pillar (2) and match drill seven 13/32 inch diameter holes through B-pillar plate (4) and vehicle B-pillar (2). Refer to figure 13a.
- 12. Match drill three 11/32 inch diameter holes through left B-pillar plate (4) and B-pillar sail panel (1). Refer to figure 13a.
- 13. Match drill three 11/32 inch diameter holes through left B-pillar plate (4) and left turret support tube bracket subassembly (3). Refer to figure 13a.



have been drilled using appropriate primer per MIL-C-53072.

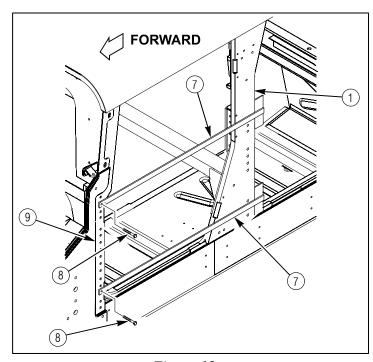


Figure 12c.

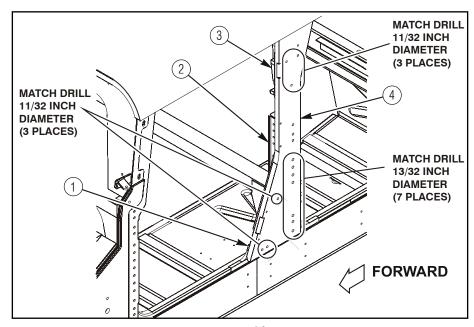


Figure 13a.

- 15. Apply 8030-01-025-1692 sealing compound to threads of three 4397000-060 capscrews (16) and three 4397000-067 capscrews (13). Refer to figure 13b.
- 16. Install 6435094-01M1 left side door hinge (11) on B-pillar plate (4) with three 4397000-060 capscrews (16) and 4397005-015 washers (17) as shown in figure 13b. Do not tighten capscrews (16) at this time.
- 17. Install three 4397000-067 capscrews (13), 4397005-015 washers (12), and one 6435235-01M1 B-pillar nut plate (10) as shown in figure 13. Do not tighten capscrews (13) at this time.
- 18. Install four 4397000-067 capscrews (14), eight 4397005-015 washers (15), and four 4397064-005 locknuts (18) as shown in figure 13b. Position capscrews (13, 14, and 16) in center of slotted holes in hinge (11), and tighten top and bottom capscrews (16 and 13) to 37 lb-ft (50.2 N⋅m), then snug up remaining capscrews (13 and 16) and locknuts (18).
- 19. Secure left turret support tube bracket subassembly (3) to left B-pillar plate (4) with three 4397000-040 capscrews (7), six 4397005-013 washers (8), and three 4397064-003 locknuts (9) as shown in figure 13c (4397005-013 washer (8) may be substituted with 4397005-012 washer if washer interferes with turret support tube bracket subassembly (3)). Install existing B-pillar bracket spacers (5 and 6)

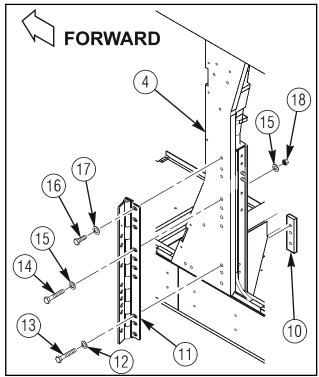


Figure 13b.

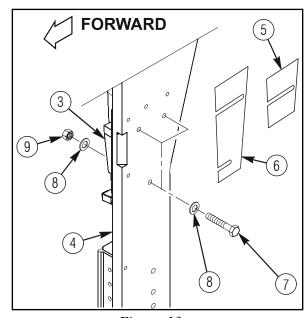


Figure 13c.

as required, and tighten locknuts (9) or capscrews (7) to 21 lb-ft (28.5 N·m). Remove clamp from B-pillar plate (4) and vehicle B-pillar (2).

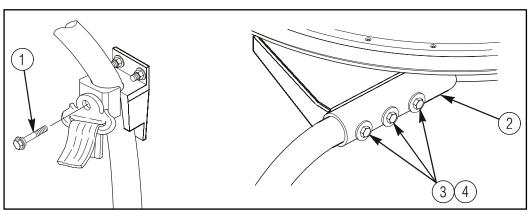


Figure 14a.

- 20. Remove seat belt shoulder bolt (1) and apply 8030-01-025-1692 sealing compound to threads. Reinstall and tighten seat belt shoulder bolt (1) to 40 lb-ft (54.2 N·m). Refer to figure 14a.
- 21. Remove three capscrews (3) and washers (4) from turret support assembly (2) and apply 8030-01-025-1692 sealing compound to threads of capscrews (3).

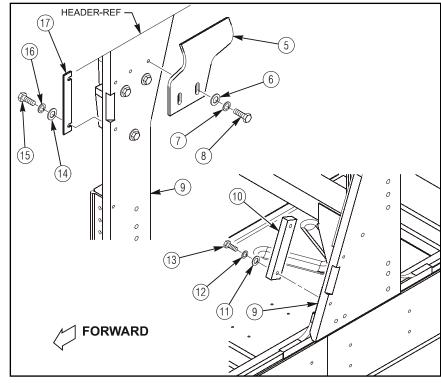


Figure 14b.

Reinstall three capscrews (3) and washers (4) and tighten capscrews (3) to 37 lb-ft (50.2 $N \cdot m$). Refer to figure 14a.

22. Apply a bead of sealant at the joint between header and B-pillar plate (9). Refer to figure 14b.

NOTE

Re-tap all 5/16-18 threaded holes in B-pillar plate before assembly.

23. Install 6435620-01M1 or 6435620-200M1 left B-pillar deflector plate (5) with two 4397000-036 capscrews (8), 4397004-007 lockwashers (7), and 4397005-013 washers (6) as shown in figure 14b. Tighten capscrews (8) to 21 lb-ft (28.5 N·m).

- 24. Install 6435293-01M1 lower B-pillar latch ramp (10) on left B-pillar plate (9) with two 4397000-038 capscrews (13), 4397004-007 lockwashers (12), and 4397005-013 washers (11) as shown in figure 14b. Tighten capscrews (13) to 21 lb-ft (28.5 N·m).
- 25. Install 6435292-01M1 upper B-pillar latch ramp (17) on left B-pillar plate (9) with two 4397000-033 capscrews (15), 4397004-007 lockwashers (16), and 4397005-013 washers (14) as shown in figure 14b. Tighten capscrews (15) to 21 lb-ft (28.5 N·m).

CAUTION

Do not remove all safety strap bracket bolts at the same time to prevent B-pillar from dropping.

- 26. Remove existing rear door safety strap bracket capscrews one at a time and replace with 4397000-050 capscrews (17). Refer to figure 15a.
- 27. Install 6435652-01M1 safety strap bracket (16) on two capscrews (17) and secure with two 4397005-013 washers (13) and 4397064-003 locknuts (14) as shown in figure 15a. Tighten locknuts (14) to 21 lb-ft (28.5 N·m).

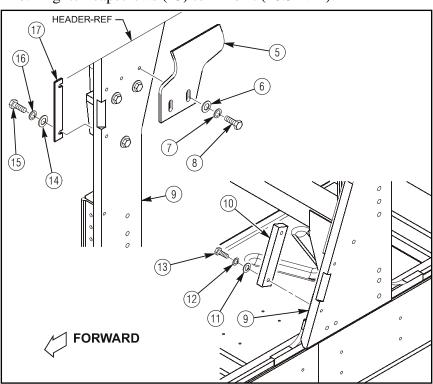


Figure 14b.

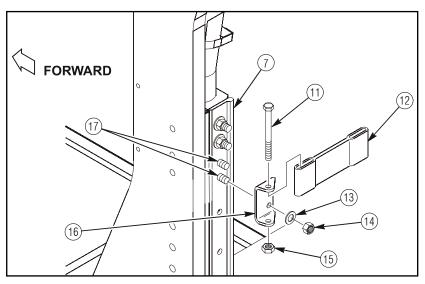
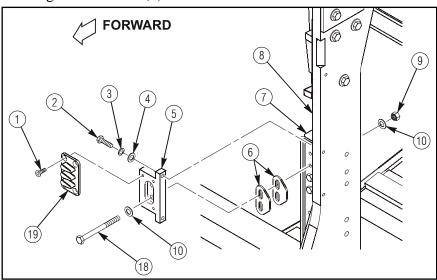


Figure 15a.

- 28. Install 6435228-01M1 front door guide mount (5) on vehicle B-pillar (7) with two existing shims (6) (use additional 4668621-002 shims as required), two 4397000-052 capscrews (18), four 4397005-013 washers (10), and two 4397064-003 locknuts (9) as shown in figure 15b. Do not tighten locknuts (9) at this time.
- 29. Secure front door guide mount (5) to left B-pillar plate (8) with two 4397000-039 capscrews (2), 4397004-007 lockwashers (3), and 4397005-012 washers (4) as shown in figure 15b. Tighten capscrews (2) and locknuts (9) to 21 lb-ft (28.5 N·m).



30. Apply 8030-01-025-1692 sealing

Figure 15b.

- 1692 sealing compound to threads of four 4397031-089 flat socket head screws (1). Refer to figure 15b.
- 31. Install 6437133-01M1 male door guide (19) on front door guide mount (5) with four 4397031-089 flat socket head screws (1) as shown in figure 15b. Tighten screws (1) to 10 lb-ft (13.6 N·m).
- 32. Install 6435262-01M1 rear door strap (12) in safety strap bracket (16) and secure with one 4397000-046 capscrew (11) and 4397064-003 locknut (15) as shown in figure 15a. Tighten locknut (15) until three or four threads of capscrew (11) are extended through locknut (15).

33. Secure left fire sensor bracket (3) to left B-pillar plate (1) with 6430528-05M1 serrated lockwasher (2), 4397005-013 washer (7), 4397004-007 lockwasher (5), and 4397000-034 capscrew (6) as shown in figure 16. Tighten capscrew (6) to 21 lb-ft (28.5 N·m), and secure clamp (4).

V. Install right side B-pillar and related parts as follows:

1. Remove existing locknut (3), shoulder bolt (7), washer (6), and seat belt D-ring (1) from turret support

tube (5) as shown in figure 17a. Discard locknut (3).

- 2. Ensure D-ring mounting bracket (2) is in mounting position, and install 6435218-01M1 right turret support tube bracket subassembly (4) and existing seat belt D-ring (1) with existing washer (6) and shoulder bolt (7) as shown in figure 17b. Hand tighten shoulder bolt (7) until snug.
- 3. Loosen three capscrews (9) securing B-pillar support tube (5) to turret support assembly (8) as shown in figure 17d.

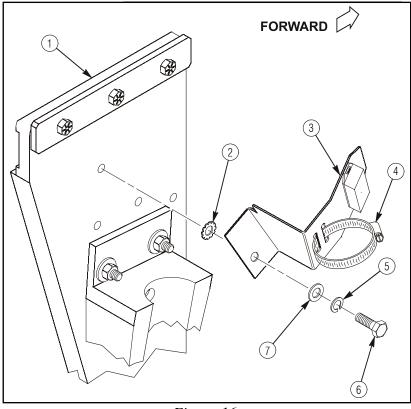


Figure 16.

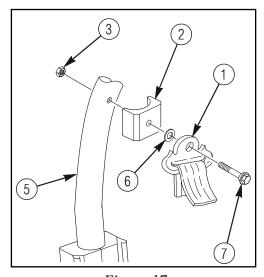


Figure 17a.

- 4. Remove two screws (10), locknuts (16), serrated washers (17) and fire sensor (12) from existing fire sensor bracket (15) as shown in figure 17c. Retain all parts.
- 5. Remove and retain existing clamp (11) from existing fire sensor bracket (15) and B-pillar support tube (5). Refer to figure 17c.
- 6. Install existing clamp (11) through 6435677-01M1 right fire sensor bracket (13), and around B-pillar support tube (5). Do not tighten clamp (11) at this time. Refer to figure 17c.

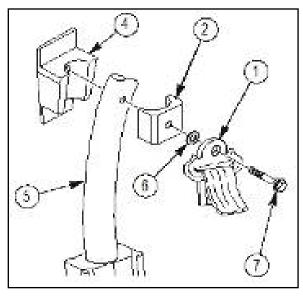


Figure 17b.

7. Install fire sensor (12) on right fire sensor bracket (13) with two existing screws (10), serrated washers (17), and locknuts (14) as shown in figure 17c. Tighten locknuts (14).

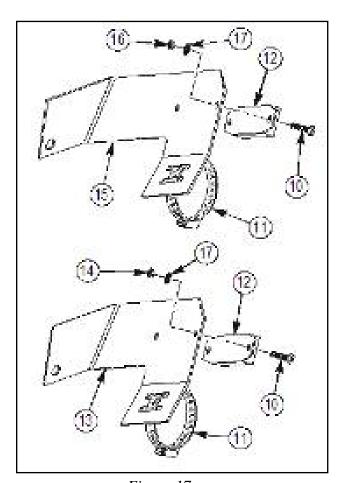


Figure 17c.

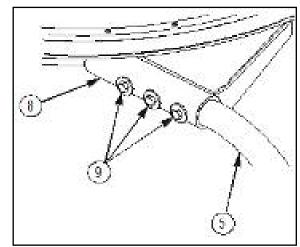


Figure 17d.

8. Install 6435220-01M1 or 6435220-200M1 right Bpillar plate (1) with three 4397000-041 capscrews (2), one 6435490-01M1 Bpillar upper washer plate (3), and three 4397064-003 locknuts (5) as shown in figure 18a. Install

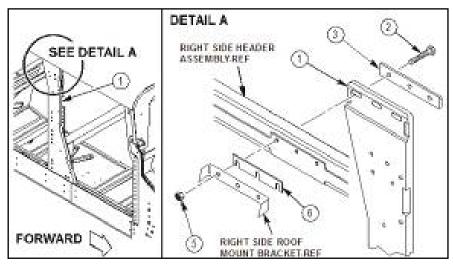


Figure 18a.

- existing shims (6) as required, and hand tighten locknuts (5).
- 9. Refer to step CC. for header panel inspection and adjustment.
- 10. Install one M00650BAS001-01M1 B-pillar spacer gage (7) on A-pillar (9) with existing front door mounting capscrew (8) (.375-16 X 3.50) as shown in figure 18b or two M00631BAS001-01M1 B-pillar spacer gages (7) on A-pillar (9) with two existing front door mounting capscrews (8) (.375-16 X 3.50) as shown in figure 18c. Ensure back edge of left B-pillar plate (1) is tight against B-pillar spacer gages (7), and tighten three capscrews (item 2 figure 18a) to 21 lb-ft (28.5 N·m). Remove capscrews (8) and B-pillar spacer gages (7).

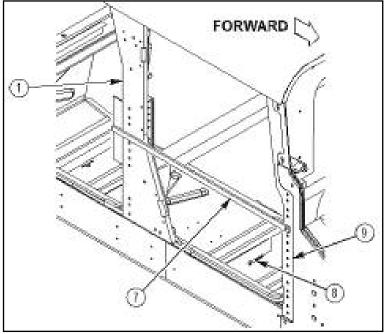


Figure 18b.

- 11. Clamp right B-pillar plate (4) to vehicle B-pillar (2) and match drill seven 13/32 inch diameter holes. Refer to figure 19a.
- 12. Match drill three 11/32 inch diameter holes through right B-pillar plate (4) and B-pillar sail panel (1). Refer to figure 19a.
- 13. Match drill three 11/32 inch diameter holes through right B-pillar plate (4) and right turret support tube bracket subassembly (3). Refer to figure 19a.

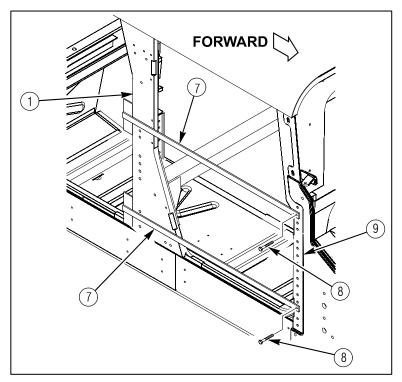


Figure 18c.

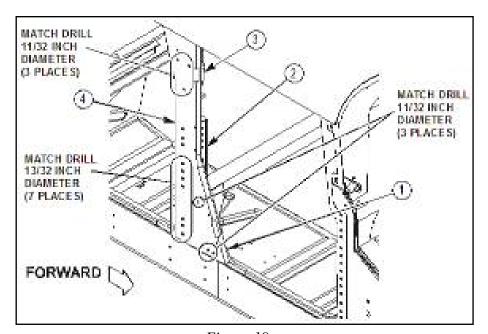


Figure 19a.

14. Repair finish all surfaces that have been drilled using appropriate primer per MIL-C-53072.

- 15. Apply 8030-01-025-1692 sealing compound to threads of three 4397000-060 capscrews (16) and three 4397000-067 capscrews (13).Refer to figure 19b.
- 16. Install 6435234-01M1 right side door hinge (11) on B-pillar plate (4) with three 4397000-060 capscrews (16) and 4397005-015 washers (17) as shown in figure 19b. Do not tighten capscrews (16) at this time.
- 17. Install three 4397000-067 capscrews (13), 4397005-015 washers (12), and one 6435235-01M1 B-pillar nut plate (10) as shown in figure 19b. Do not tighten capscrews (13) at this time.
- 18. Install four 4397000-067 capscrews (14), eight 4397005-015 washers (15), and four
 - 4397064-005 locknuts (18) as shown in
 - figure 19b. Position capscrews (13, 14, and 16) in center of slotted holes in hinge (11), and tighten top and bottom capscrews (16 and 13) to 37 lb-ft (50.2 N·m), then snug up remaining capscrews (13 and 16) and locknuts (18).
- 19. Secure right turret support tube bracket subassembly (3) to right B-pillar plate (4) with three 4397000-040 capscrews (7), six 4397005-013 washers (8), and three 4397064-003 locknuts (9) as shown in figure 19c (4397005-013 washer (8) may be substituted with 4397005-012 washer if washer interferes with turret support tube bracket subassembly (3)). Install existing right rifle mount bracket (6) and shims (5), if required, then tighten locknuts (9) or capscrews (7) to 21 lb-ft (28.5 N·m).

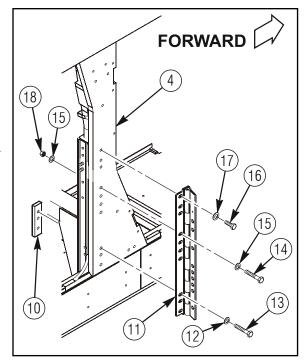
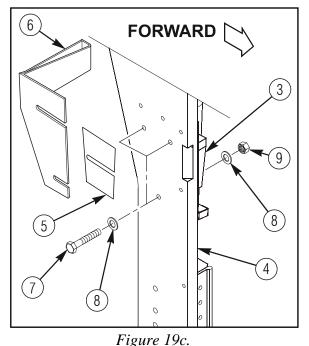


Figure 19b.



Remove clamp from B-pillar plate (4) and vehicle B-pillar (2).

20. Remove seat belt shoulder bolt (1) and apply 8030-01-025-1692 sealing compound to threads. Reinstall and tighten seat belt shoulder bolt (1) to 40 lb-ft (54.2 N⋅m). Refer to figure 20a.

- 21. Remove three capscrews (3) and washers (4) from turret support assembly (2) and apply 8030-01-025-1692 sealing compound to threads of capscrews (3). Reinstall three capscrews (3) and washers (4) and tighten capscrews (3) to 37 lb-ft (50.2 N·m). Refer to figure 20a.
- 22. Apply a bead of sealant at the joint between header and B-pillar plate (9). Refer to figure 20b.

Re-tap all 5/16-18 threaded holes in B-pillar plate before assembly.

- 23. Install 6435621-01M1 or 6435621-200M1 right B-pillar deflector plate (5) with two 4397000-036 capscrews (8), 4397004-007 lockwashers (7), and 4397005-013 washers
 - (6) as shown in figure 20b. Tighten capscrews (8) to 21 lb-ft (28.5 N·m).
- 24. Install 643529301M1 lower B-pillar latch ramp (10) on right B-pillar plate (9) with two 4397000-038 capscrews (13), 4397004-007 lockwashers (12), and 4397005-013 washers (11) as shown in figure 20b. Tighten capscrews (13) to 21 lb-ft (28.5 N·m).

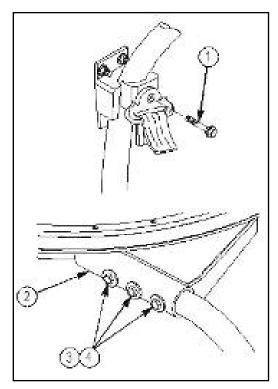


Figure 20a.

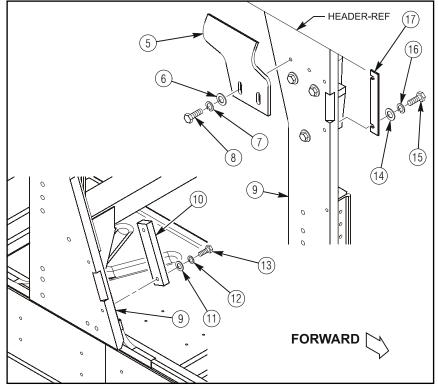


Figure 20b.

25. Install 6435292-01M1 upper B-pillar latch ramp (17) on right B-pillar plate (9) with two 4397000-033 capscrews (15), 4397004-007 lockwashers (16), and 4397005-013 washers (14) as shown in figure 20b. Tighten capscrews (15) to 21 lb-ft (28.5 N·m).

CAUTION

Do not remove all safety strap bracket bolts at the same time to prevent B-pillar from dropping.

- 26. Remove existing rear door safety strap bracket capscrews one at a time and replace with 4397000-050 capscrews (17). Refer to figure 21a.
- 27. Install 6435652-01M1 safety strap bracket (16) on two capscrews (17) and secure with two 4397005-013 washers (13) and 4397064-003 locknuts (14) as shown in figure 21a. Tighten locknuts (14) to 21 lb-ft (28.5 N·m).
- 28. Install 6435228-01M1 front door guide mount (5) on vehicle B-pillar (7) with two existing shims (6) (use additional 4668621-002

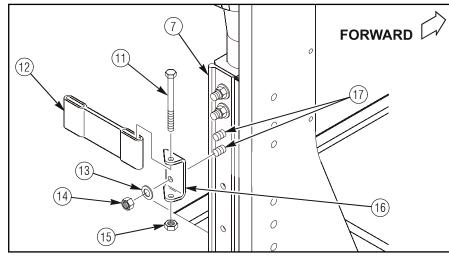


Figure 21a

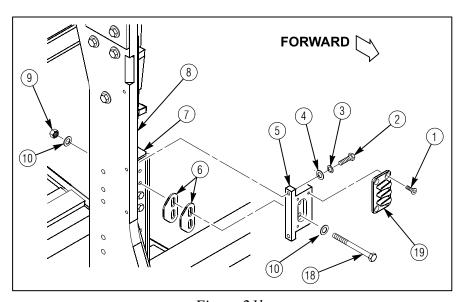


Figure 21b.

shims as required), two 4397000-052 capscrews (18), four 4397005-013 washers (10), and two 4397064-003 locknuts (9) as shown in figure 21b. Do not tighten locknuts (9) at this time.

- 29. Secure front door guide mount (5) to right B-pillar plate (8) with two 4397000-039 capscrews (2), 4397004-007 lockwashers (3), and 4397005-012 washers (4) as shown in figure 21b. Tighten capscrews (2) and locknuts (9) to 21 lb-ft (28.5 N·m).
- 30. Apply 8030-01-025-1692 sealing compound to threads of four 4397031-089 flat socket head screws (1). Refer to figure 21b.
- 31. Install 6437133-01M1 male door guide (19) on front door guide mount (5) with four 4397031-089 flat socket head screws (1) as shown in figure 21b. Tighten screws (1) to 10 lb-ft (13.6 N·m).
- 32. Install 6435262-01M1 rear door strap (12) in safety strap bracket (16) and secure with one 4397000-046 capscrew (11) and 4397064-003 locknut (15) as shown in figure 21a. Tighten locknut (15) until three or four threads of capscrew (11) are extended through locknut (15).
- 33. Secure right fire sensor bracket (3) to right B-pillar plate (1) with 6430528-05M1 serrated lockwasher (2), 4397005-013 washer (7), 4397004-007 lockwasher (6), and 4397000-034 capscrew (5) as shown in figure 22. Tighten capscrew (5) to 21 lb-ft (28.5 N⋅m), and secure clamp (4).

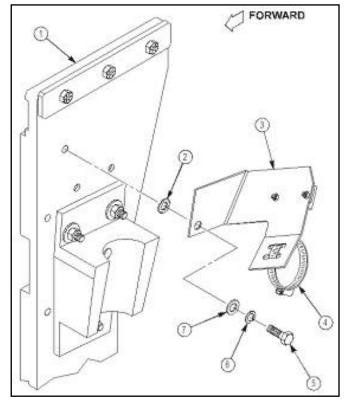


Figure 22.

W. Install left and right side A-pillar safety strap brackets as follows:

NOTE

Installation of left and right A-pillar safety strap brackets is basically the same. This procedure covers the left side.

- 1. Apply 8030-01-025-1692 sealing compound to threads of three 4397000-036 capscrews (1). Refer to figure 23a.
- 2. Install 6435651-01M1 left Apillar safety strap bracket (4) on windshield frame (3) with three 4397000-036 capscrews (1) and 4397005-013 washers (2) as shown in figure 23a. Do not tighten capscrews (1) at this time.

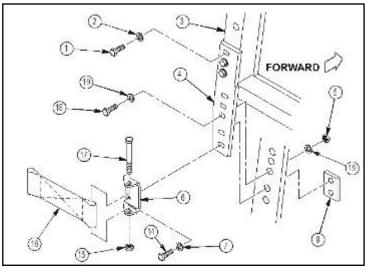


Figure 23a.

- 3. Install three 4397000-034 capscrews (18), six 4397005-013 washers (19), and three 4397064-003 locknuts (5) as shown in figure 23a. Do not tighten capscrews (18) at this time.
- 4. Apply 8030-01-025-1692 sealing compound to threads of two 4397000-034 capscrews (14). Refer to figure 23a.
- 5. Install 6435652-01M1 safety strap bracket (6) on left A-pillar safety strap bracket (4) with two 4397000-034 capscrews (14), two 4397005-013 washers (7) and one existing nut plate (8) as shown in figure 23a. Tighten three capscrews (1) to 13 lb-ft (17.6 N·m), three capscrews (18) to 21 lb-ft (28.5 N·m), and two capscrews (14) to 21 lb-ft (28.5 N·m).
- 6. Install 4668245-000 front door check strap (16) in safety strap bracket (6) and secure with one 4397000-046 capscrew (17) and 4397064-003 locknut (15) as shown in figure 23a. Tighten locknut (15) until three or four threads of capscrew (17) are extended through locknut (15).

- 7. Repeat steps W.1. through W.6. for right hand side, using 6435651-02M1 right A-pillar safety strap bracket.
- X. Install left and right side rear door lower latch ramps as follows:

Installation of left and right rear door lower latch ramps is basically the same. This procedure covers the left side.

1. Install 6435658-01M1 left rear door lower latch ramp base (12) and 6435659-01M1 left rear door lower latch ramp (9) with two 4397000-010 capscrews (13), four 4397005-011 washers (11), and two 4397064-001 locknuts (10) as shown in figure 23b. Adjust as required, and tighten locknuts (10) to 10 lb-ft (13.6 N·m).

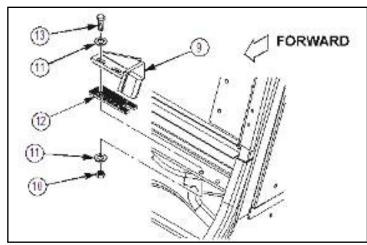


Figure 23b.

- 2. Repeat step X.1. for right hand side, using 6435668-01M1 right rear door lower latch ramp base and 6435669-01M1 right rear door lower latch ramp.
- Y. Install left and right side door guide support weldments and C-pillar door guide mounts as follows:

NOTE

Installation of left and right door guide support weldments and C-pillar door guide mounts is basically the same. This procedure covers the left side.

- 1. For vehicles equipped with rear door striker reinforcement plates only.
 - a. Install 6435680-01M1 left door guide support weldment (5) with one 4397000-036 capscrew (15), 4397005-013 washer (1), and 4397064-003 locknut (2) as shown in figure 24. Do not tighten capscrew (15) at this time.

NOTE

Rear air conditioning lines cover mounts on left side only.

- b. Install four 4397000-034 capscrews (6), 4397005-013 washers (4), 4397064-003 locknuts (3), and rear air conditioning lines cover (7) as shown in figure 24. Tighten capscrews (6 and 15) to 21 lb-ft (28.5 N·m).
- c. Install 6435491-01M1 left C-pillar door guide mount (14) with two 4397018-096 screws (9), 4397004-006 lockwashers (8), 4397000-032 capscrews (11), and 4397004-007 lockwashers (10) as shown in figure 24. Tighten screws (9) to 10 lb-ft (13.6 N·m) and capscrews (11) to 21 lb-ft (28.5 N·m).

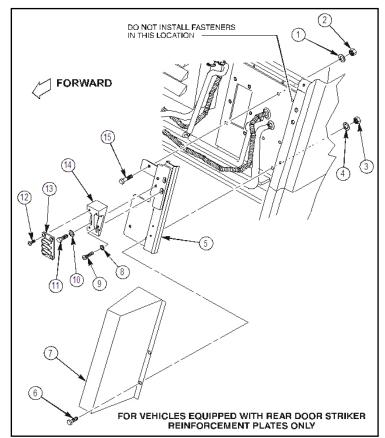


Figure 24.

- d. Apply 8030-01-025-1692 sealing compound to threads of four 4397031-089 flat socket head screws (12). Refer to figure 24.
- e. Install 6437133-01M1 male door guide (13) with four 4397031-089 flat socket head screws (12) as shown in figure 24. Tighten screws (12) to 10 lb-ft (13.6 N·m).
- f. Repeat steps Y.1.a. through Y.1.e. for right side, using 6435679-01M1 right door guide support weldment and 6435676-01M1 right C-pillar door guide mount.

2. For vehicles not equipped with rear door striker reinforcement plates only.

NOTE

The following items will need to be ordered for vehicles not equipped with rear door striker reinforcement plates:

- 2510-01-520-3995 (1000321-002) Tapping Plate, Rear Door Striker (Qty 2)
- 5340-01-521-4569 (1000322-002) Retainer Strap, Rear Door Striker (Qty 2)
- 5320-01-529-9455 (4397081-009) Rivet (Qty 4)

NOTE

Access right side nutplate through fuel filler area, and access left side nutplate through left rear wheel well access hole.

- a. Hold existing left rear door striker nutplate (3) in place through appropriate access area and remove rivet (2) from body channel (1). Remove and discard nutplate (3). Refer to figure 25a.
- b. Pull closed-cell foam rubber strip (6) off back edge of rear door opening. Retain rubber strip (6) for reassembly. Refer to figure 25b.

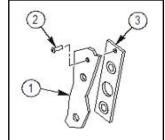


Figure 24.

- c. Enlarge two mounting holes in left rear HVAC lines cover (15) to 21/64 inch diameter. Refer to figure 25c.
- d. Remove two upset nuts (5) from locations shown in figure 25b. Left side only.

NOTE

Ensure rear door striker tapping plate is oriented as shown.

e. Temporarily install one 4397018-096 screw (4) in 1000321-002 rear

- door striker tapping plate (7). Ensure threads of screw (4) extend at least 1/4 inch through rear door striker tapping plate (7). Refer to figure 25b.
- f. Place rear door striker tapping plate (7), with protruding screw (4), in rear door striker mounting location as shown in figure 25b. Slide tapping plate (7) up and mark location of top edge.
- g. Remove tapping plate (7) from rear door striker

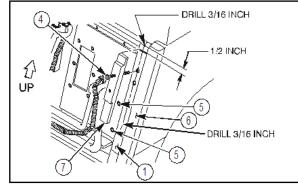


Figure 25b.

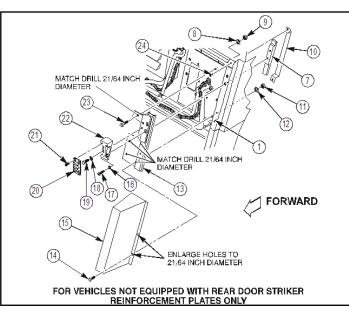


Figure 25c.

mounting location and remove screw (4). Refer to figure 25b.

h. Mark a hole location in the center of body channel (1), 1/2 inch up from mark referencing top of tapping plate (7), and drill a 3/16 inch diameter hole at this location. Refer to figure 25b.

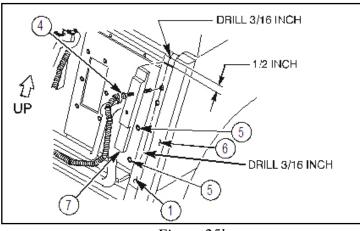


Figure 25b.

- i. Using 1000322-002 rear door striker retainer strap (10) as a guide, mark and drill a 3/16 inch diameter hole for bottom rear door striker retainer strap mounting hole. Refer to figure 25c.
- j. Install 1000321-002 rear door striker tapping plate (7) through access area, and temporarily hold in place with one 4397018-096 screw (17). Refer to figure 25c.

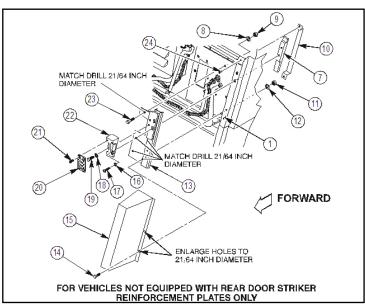


Figure 25c.

NOTE

Install rear door striker retainer strap bottom rivet first.

- k. Install 1000322-002 rear door striker retainer strap (10) on rear side of body channel (1) over rear door striker tapping plate (7), and secure with two 4397081-009 rivets (24) as shown in figure 25c. Remove screw (17).
- 1. Install 6435680-01M1 left door guide support weldment (13) and 6435491-01M1 left C-pillar door guide mount (22) with two 4397018-096 screws (17) and 4397004-006 lockwashers (16) as shown in figure 25c. Do not tighten screws (17) at this time.

m. Install two 4397000-032 capscrews (19) and 4397004-007 lockwashers (18) as shown in figure 25c. Tighten capscrews (19) to 21 lb-ft (28.5 N·m) and screws (17) to 10 lb-ft (13.6 N·m).

CAUTION

To prevent damage to equipment, use drill stops or equivalent when drilling through vehicle wheel wells.

- n. Match drill five 21/64 inch diameter holes through left door guide support weldment (13). Refer to figure 25c.
- o. Install one 4397000-036 capscrew (23), 4397005-013 washer (8), and 4397064-003 locknut (9) as shown in figure 25c. Do not tighten capscrew (23) at this time.

NOTE

Rear HVAC lines cover mounts on left side only.

p. Install four 4397000-034 capscrews (14), 4397005-013 washers (12), 4397064-003 locknuts (11), and rear HVAC lines cover (15) as shown in figure 25c. Tighten capscrews (14 and 23) to 21 lb-ft (28.5 N·m).

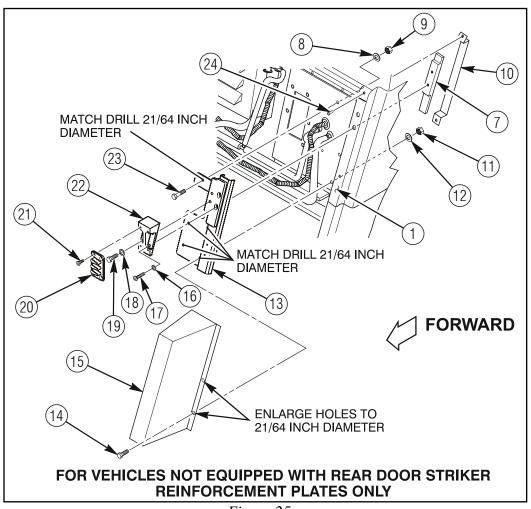


Figure 25c.

- q. Apply 8030-01-025-1692 sealing compound to threads of four 4397031-089 flat socket head screws (21). Refer to figure 25c.
- r. Install 6437133-01M1 male door guide (20) with four 4397031-089 flat socket head screws (21) as shown in figure 25c. Tighten screws (21) to 10 lb-ft (13.6 N·m).
- s. Reinstall closed-cell foam rubber strip (6) along back edge of rear door opening. Refer to figure 25c.
- t. Repeat steps Y.2.a. through Y.2.s. for right side, using 6435679-01M1 right door guide support weldment and 6435676-01M1 right C-pillar door guide mount.
- Z. Install left and right side upper rear door latch ramps and upper C-pillar overlays as follows: **NOTE**

Installation of left and right upper rear door latch ramps and upper C-pillar overlays is basically the same. This procedure covers the left side.

- 1. Remove two locknuts (3) and capscrews (1) from upper C-pillar armor (2) as shown in figure 26a. Discard all fasteners.
- 2. Install 6435222-01M1 or 6435222-200M1 left hand upper C-pillar overlay (6) on upper C-pillar armor (2) with two 4397000-012 capscrews (8), 4397005-011 washers (7), 4397083-001 aluminum washers (5) (use as spacers, only as required), and two 4397064-
 - 001 locknuts (4) as shown in figure 26b. Do not tighten capscrews (8) at this time.
- 3. Install two 4397000-014 capscrews (9), four 4397005-011 washers (10), 4397083-001 aluminum washers (11) (use as spacers, only as required), and two 4397064-001 locknuts (14) as shown in figure 26b. Do not tighten capscrews (9) at this time.
- 4. Slide 6435623-01M1 upper left rear door latch ramp (13) in place as shown in figure 26b. Install 6435395-01M1, 6435395-02M1, or 6435395-03M1 shims (12) as required. Tighten capscrews (8 and 9) to 10 lb-ft (13.6 N·m).
- 5. Repeat steps Z.1. through Z.4. for right side, using 6435223-01M1 or 6435223-200M1 right hand upper C-pillar overlay and 6435624-01M1 upper right rear door latch ramp.

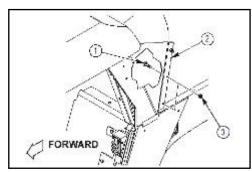


Figure 26a.

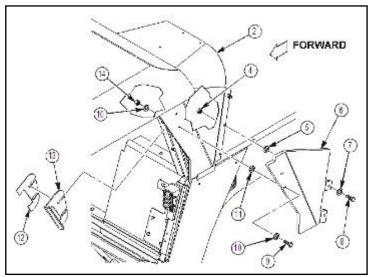


Figure 26b.

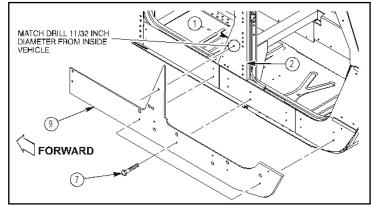


Figure 27a.

AA. Install left side frag 1A overlays as follows:

1. Temporarily install existing left side rocker panel aluminum overlay (9) using three 4397001-072 or 4397001-073 capscrews (7) as shown in figure 27a. Clamp overlay (9)

in place and match drill one 11/32 inch diameter hole from inside sail panel (1) through B-pillar plate (2) and overlay (9).

- 2. Remove clamp, left side rocker panel aluminum overlay (9), and three capscrews (7). Refer to figure 27a.
- 3. Repair finish all surfaces that have been drilled using appropriate primer per MIL-C-53072.
- 4. Install 6435008-01M1 or 6435008-200M1 left rocker panel IED overlay (8) and existing left side rocker panel aluminum overlay (9) with two 4397001-072 capscrews (7), four 4397005-014 washers (3), and two 4397064-006 locknuts (4) as shown in figure 27b. Do not tighten locknuts (4) at this time.

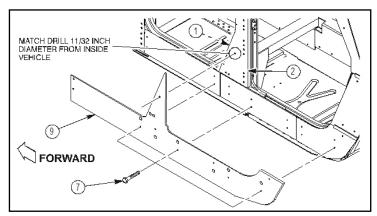


Figure 27a.

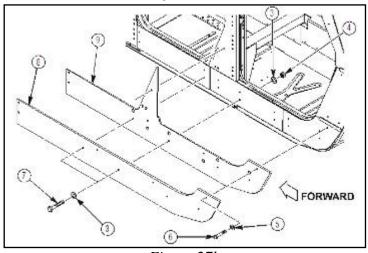


Figure 27b.

- 5. Apply 8030-01-025-1692 sealing compound to threads of one 4397000-016 capscrew (6). Refer to figure 27b.
- 6. Install 4397000-016 capscrew (6) and 4397005-010 washer (5) as shown in figure 27b. Do not tighten capscrew (6) at this time.
- 7. Install three 4397000-020 capscrews (6), six 4397005-010 washers (5), and three 4397064-001 locknuts (4) as shown in figure 28. Do not tighten locknuts (4) at this time.
- 8. Install one 4397000-041 capscrew (13), two 4397005-013 washers (1), and one 4397064-003 locknut (2) as shown in figure 28. Do not tighten locknut (2) at this time.
- 9. Install 6435350-01M1 or 6435350-200M1 B-pillar washer plate (12) with two 4397000-041 capscrews (10), 4397004-007 lockwashers (11), and one 6435630-01M1 lower B-pillar nut plate (3) as shown in figure 28. Do not tighten capscrews (10) at this time.

- Remove two capscrews and C-pillar lower armor assembly (14) and discard capscrews. Refer to figure 28.
- 11. Apply 8030-01-025-1692 sealing compound to threads of four 4397000-015 capscrews (9). Refer to figure 28.
- 12. Install 6435015-01M1 or 6435015-200M1 lower C-pillar panel IED overlay (7) and C-pillar lower armor assembly (14) with four 4397000-015 capscrews (9) and 4397005-010 washers (8)

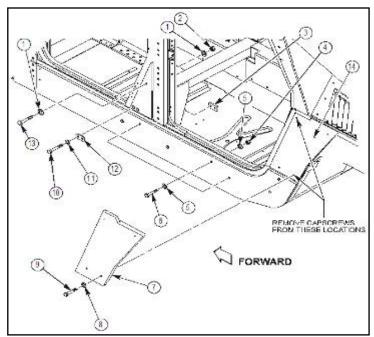


Figure 28.

as shown in figure 28. Tighten capscrews (9) to 6 lb-ft (8.1 $N \cdot m$).

- 13. Remove four capscrews (15), washers (16), and locknuts (17) from vehicle body (5) as shown in figure 29a. Discard all fasteners.
- 14. Install 6435010-01M1 or 6435010-200M1 left hand Apillar panel IED overlay (3) on vehicle body (5). Push left hand A-pillar panel IED overlay (3) forward towards front of vehicle and secure with three 4397000-069 capscrews (1), 4397005-014 washers (2), and 4397064-005 locknuts (6) as shown in figure 29b. Do not tighten locknuts (6) at this time.

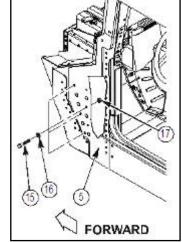


Figure 29a.

- 15. Install 4397000-070 capscrew (4), 4397005-014 washer (2), and 4397064-005 locknut (6) as shown in figure 29b. Do not tighten locknut (6) at this time.
- 16. Apply 8030-01-025-1692 sealing compound to threads of one 4397000-041 capscrew (18). Refer to figure 29b.
- 17. Install 4397000-041 capscrew (18) and 4397005-013 washer (19) as shown in figure 29b. Do not tighten capscrew (18) at this time.

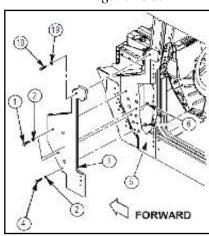


Figure 29b. 6434899-01M1

Change No. 1

- 18. Apply 8030-01-025-1692 sealing compound to threads of three 4397000-077 capscrews (7). Refer to figure 29.
- 19. Install existing modified A-pillar to rocker gap plate (14) with three 4397000-077 capscrews (7) as shown in figure 29c. Do not tighten capscrews (7) at this time.
- 20. Install 4397001-073 capscrew (8), 4397005-014 washer (12), and 4397064-006 locknut (13) as shown in figure 29c. Do not tighten locknut (13) at this time.
- 21. Install 4397000-020 capscrew (9), 4397005-010 washer (10), and 4397064-001 locknut (11) as shown in figure 29c. Tighten three capscrews (7) and one locknut (13) to 37 lb-ft (50.2 N·m), and locknut (11) to 10 lb-ft (13.6 N·m).
- 22. Tighten two locknuts (4) to 37 lb-ft (50.2 N·m) and one capscrew (6) to 6 lb-ft (8.1N·m). Refer to figure 27b.
- 23. Tighten three locknuts (4) to 10 lb-ft (13.6 N·m), one locknut (2) to 21 lb-ft (28.5 N·m), and two capscrews (10) to 21 lb-ft (28.5 N·m). Refer to figure 28.
- 24. Tighten four locknuts (6) to 37 lb-ft (50.2 N·m), and one capscrew (18) to 13 lb-ft (17.6 N·m). Refer to figure 29b.

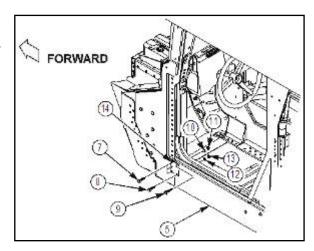


Figure 29c.

- 25. Remove twelve capscrews (10) and locknuts (2) from vehicle body (1) as shown in figure 30a. Discard all fasteners.
 - 26. Apply 8030-01-025-1692 sealing compound to threads of two 4397000-068 capscrews (7). Refer to figure 30.
- 27. Install 6435017-01M1 or 6435017-200M1 front door header panel IED overlay (9) on vehicle body (1). Push forward towards front of vehicle and secure with two 4397000-068 capscrews (7) and 4397005-015 washers (8) as shown in figure 30b. Tighten capscrews (7) to 23 lb-ft (31.2 N⋅m).

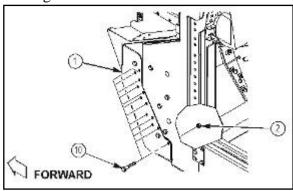


Figure 30a

28. Install 6435225-01M1 or 6435225-200M1 left A-pillar underbody overlay (6) on vehicle body (1). Push forward towards front of vehicle and secure with twelve 4397000-069 capscrews (4), 4397005-014 washers (5), and 4397064-005 locknuts (3) as shown in figure 30b. Tighten locknuts (3) to 37 lb-ft (50.2 N·m).

BB. Install right side frag 1A overlays as follows:

- 1. Temporarily install existing right side rocker panel aluminum overlay (9) using three 4397001-072 or 4397001-073 capscrews (7) as shown in figure 31a. Clamp overlay (9) in place and match drill one 11/32 inch diameter hole from inside sail panel (1) through B-pillar plate (2) and overlay (9).
- 2. Remove clamp, right side rocker panel aluminum overlay (9), and three capscrews (7). Refer to figure 31a.
- 3. Repair finish all surfaces that have been drilled using appropriate primer per MIL-C-53072.
- 4. Install 6435007-01M1 or 6435007-200M1 right rocker panel IED overlay (8) and existing right side rocker panel aluminum overlay (9) with two 4397001-072

FORWARD Figure 30b

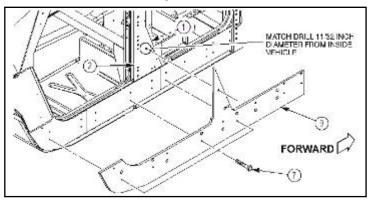


Figure 31a

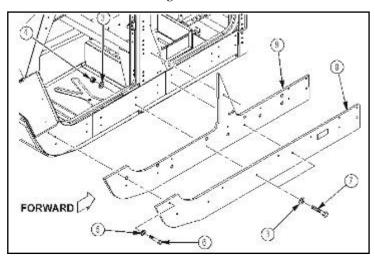


Figure 31b

capscrews (7), four 4397005-014 washers (3), and two 4397064-006 locknuts (4) as shown in figure 31b. Do not tighten locknuts (4) at this time.

- 5. Apply 8030-01-025-1692 sealing compound to threads of one 4397000-016 capscrew (6). Refer to figure 31b.
- 6. Install 4397000-016 capscrew
 (6) and 4397005-010 washer
 (5) as shown in figure 31b. Do not tighten capscrew (6) at this time.
- 7. Install six 4397000-020 capscrews (3), twelve 4397005-010 washers (2), and six 4397064-001 locknuts (1) as shown in figure 32a. Do not tighten locknuts (1) at this time.
- 8. Install one 4397000-041 capscrew (5), two 4397005-013 washers (4), and one 4397064-003 locknut (10) as shown in figure 32b. Do not tighten locknut (10) at this time.
- 9. Install 6435350-01M1 or 6435350-200M1 B-pillar washer plate (8) with two 4397000-041 capscrews (7), 4397004-007 lockwashers (6), and one 6435630-01M1 lower B-pillar nut plate (9) as shown in figure 32b. Do not tighten capscrews (7) at this time.
- 10. Remove three capscrews (1) and fuel door aluminum overlay (3) from fuel door armor (2) as shown in figure 33a. Discard capscrews (1).

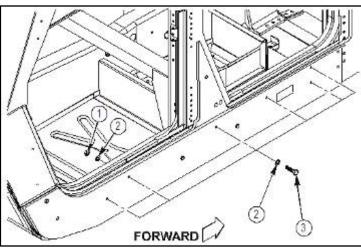


Figure $\overline{32a}$

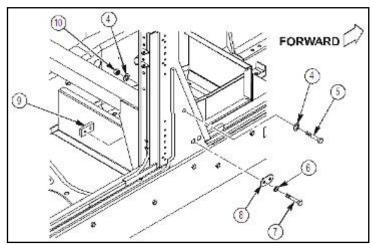


Figure 32b

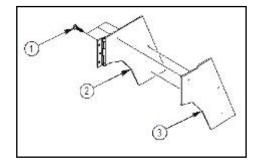
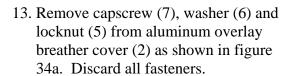
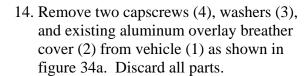


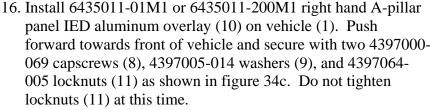
Figure 33a

- 11. Apply 8030-01-025-1692 sealing compound to threads of three 4397000-012 capscrews (5). Refer to figure 33b.
- 12. Install fuel door aluminum overlay (3) and 6435016-01M1 or 6435016-200M1 fuel door panel IED overlay (4) on fuel door armor (2) with three 4397000-012 capscrews (5) as shown in figure 33b. Tighten capscrews (5) to 10 lb-ft (13.6 N·m).





15. Remove two capscrews (12), washers (13), and locknuts (14) from vehicle (1) as shown in figure 34b. Discard all fasteners.



17. Apply 8030-01-025-1692 sealing compound to threads of three 4397000-077 capscrews (10). Refer to figure 35a.

- 18. Install existing modified A-pillar to rocker gap plate (13) with three 4397000-077 capscrews (10) as shown in figure 35a. Do not tighten capscrews (10) at this time.
- 19. Install 4397001-073 capscrew (12), 4397005-014 washer (14), and 4397064-006 locknut (15) as shown in figure 35a. Do not tighten locknut (15) at this time.
- 20. Install 4397000-020 capscrew (11), 4397005-010 washer

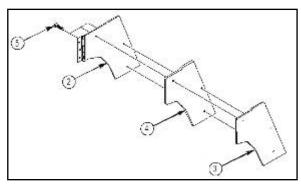


Figure 33b

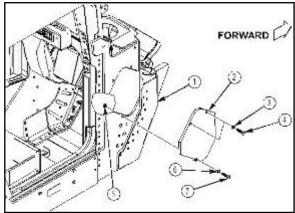


Figure 34a

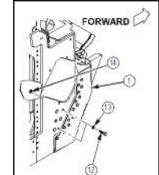


Figure 34b

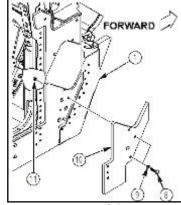


Figure 34c

- (17), and 4397064-001 locknut (16) as shown in figure 35a. Tighten three capscrews (10) and one locknut (15) to 37 lb-ft (50.2 N·m), and locknut (16) to 10 lb-ft (13.6 N·m).
- 21. Tighten two locknuts (4) to 37 lb-ft (50.2 N·m), and one capscrew (6) to 6 lb-ft (8.1 N·m). Refer to figure 31b.
- 22. Tighten six locknuts (1) to 10 lb-ft (13.6 N·m), one locknut (10) to 21 lb-ft (28.5 N·m). and two capscrews (7) to 21 lb-ft (28.5 N·m). Refer to figure 32.
- 23. Tighten two locknuts (11) to 37 lb-ft (50.2 N·m). Refer to figure 34c.
- 24. Remove capscrew (3), washer (2), and existing right side A-pillar aluminum overlay (1) from vehicle (4) as shown in figure 35b. Discard all fasteners.

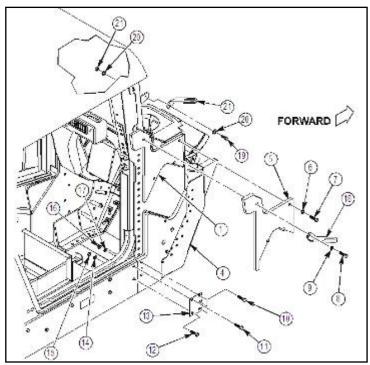
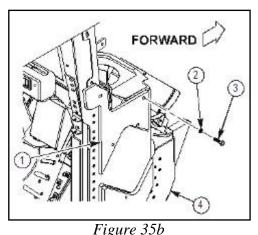


Figure 35a

- 25. Apply 8030-01-025-1692 sealing compound to threads of 4397000-015 capscrew (7) and 4397000-041 capscrew (8). Refer to figure 35a.
- 26. Install 6435012-01M1 or 6435012-200M1 upper right A-pillar panel IED overlay (5), existing right side A-pillar aluminum overlay (1), and 6435019-01M1 or 6435019-200M1 lower right hand mirror bracket (18) on vehicle (4). Push forward towards front of vehicle and secure with 4397000-041 capscrew (8), 4397005-013 washer (9), 4397000-015 capscrew (7), and 4397005-010 washer (6) as shown in figure 35a. Tighten capscrew (8) to 21 lb-ft (28.5 N·m) and capscrew (7) to 6 lb-ft (8.1 N·m).



27. Install 6435489-01M1 or 6435489-200M1 upper right hand mirror bracket (21) with one 4397000-034 capscrew (19), two 4397005-012 washers (20), and one 4397064-003 locknut (21) as shown in figure 35a. Tighten locknut (21) to 21 lb-ft (28.5 N·m)

- 28. Apply 8030-01-025-1692 sealing compound to threads of two 4397000-040 capscrews (3). Refer to figure 36.
- 29. Install 6435013-01M1 or 6435013-200M1 breather cover (4) with two 4397000-040 capscrews (3), two 4397005-013 washers (2), and four 4397083-001 aluminum washers (1) as shown in figure 36. Do not tighten capscrews (3) at this time.
- 30. Install 4397000-072
 capscrew (5), 4397005-015
 washer (6), two 4397083-001
 aluminum washers (7), and
 one 4397064-005 locknut (8)
 as shown in figure 36.
 Tighten two capscrews (3) to
 21 lb-ft (28.5 N·m), and
 locknut (8) to 37 lb-ft (50.2 N·m).
- 31. Remove twelve capscrews (2) and locknuts (10) from vehicle body (1) as shown in figure 37a.
- 32. Apply 8030-01-025-1692 sealing compound to threads of two 4397000-068 capscrews (5). Refer to figure 37b.
- 33. Install 6435017-01M1 or 6435017-200M1 front door header panel IED overlay (3) on vehicle body (1) with two 4397000-068 capscrews (5) and 4397005-015 washers (4) as shown in figure 37b. Tighten capscrews (5) to 23 lb-ft (31.2 N·m).
- 34. Install 6435224-01M1 or 6435224-200M1 right A-pillar underbody overlay (6) on vehicle body (1). Push forward towards front of vehicle and secure with twelve 4397000-069 capscrews (7), 4397005-014 washers (8), and 4397064-005 locknuts

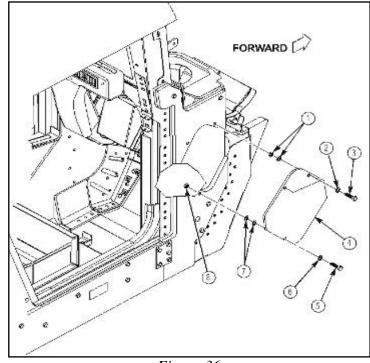


Figure 36

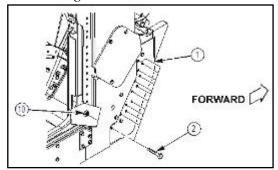


Figure 37a

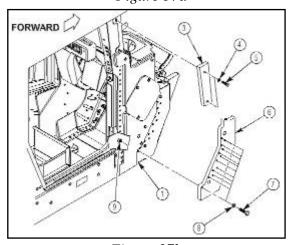


Figure 37b

- (9) as shown in figure 37b. Tighten locknuts (9) to 37 lb-ft (50.2 N·m).
- CC. Inspect and adjust the left or right header panels as follows:
 - 1. Standing at the A-pillar, look towards the rear of truck using the header panel as a guide. Header panel should be straight from front to back.
 - a. If center of header panel at the B-pillar is straight, no adjustment is needed.
 - b. If center of header panel is pushed inboard proceed to step (2)
 - 2. Loosen three capscrews (9) securing B-pillar support tube (5) to turret support assembly (8). Refer to figure 11 for left side and figure 17 for the right side.
 - 3. Loosen three capscrews (2) and remove number of shims (6) as necessary to straighten out header panel. Refer to figure 12 for the left side and figure 18 for the right side.
 - 4. Repeat step CC.5. as necessary to straighten header panel.
 - 5. Once header panel is straight, tighten capscrews (2) to 21 lb-ft (28 N·m). Refer to figure 12 for the left side and figure 18 for the right side.

DD. Install left and right side front door assemblies as follows:

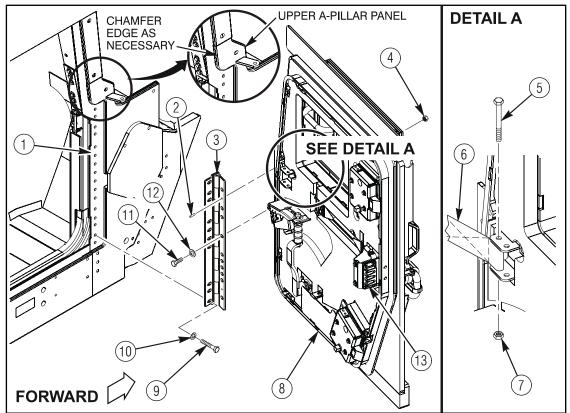


Figure 38a

WARNING

Vehicle door is extremely heavy and must be supported during installation. Failure to do so may cause injury to personnel or damage to equipment.

CAUTION

To prevent damage to armored glass, protect all exposed glass surfaces during installation of door.

NOTE

Installation of left and right side front door assemblies is basically the same. This procedure covers the right side.

1. Lift 6435211-01M1 or 6435211-200M1 right front door assembly (8) using an appropriate hoist and M00626BAS001 hanger bracket door fixture. Refer to figure 38a.

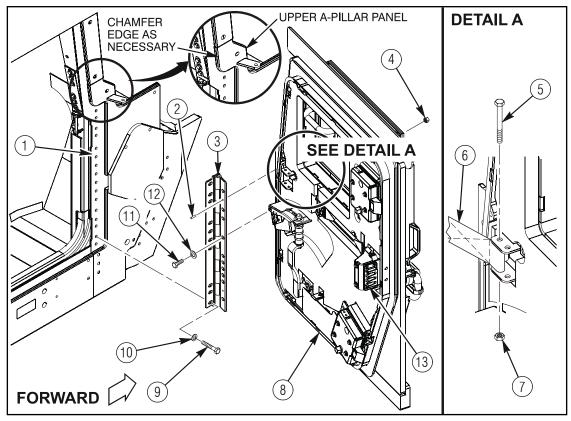
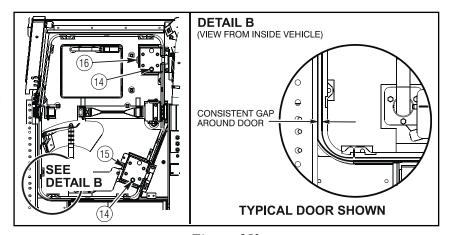


Figure 38a

- 2. Apply 8030-01-025-1692 sealing compound to threads of ten 4397000-073 capscrews (9). Refer to figure 38a.
- 3. Install 6435234-01M1 right side door hinge (3) on vehicle A-pillar (1) with ten
 - 4397000-073 capscrews (9) and 4397005-015 washers (10) as shown in figure 38a. Position capscrews (9) in center of slotted holes in hinge (3), and tighten top and bottom capscrews (9), then snug up remaining eight capscrews (9).



4. Install two 4397025- Figure 38b 026 dowel pins (2) through installed hinge (3) as shown in figure 38a.

- 5. Position right front door assembly (8) against installed hinge (3) and align to dowel pins. Install ten 4397000-060 capscrews (11), 4397005-015 washers (12), and 4397064-005 locknuts (4) as shown in figure 38a. Tighten locknuts (4) to 37 lb-ft (50.2 N·m).
- 6. Remove hanger bracket door fixture from door.
- 7. With front door assembly (8) open, use an adjustable wrench to lock out upper latch assembly (16) and lower latch assembly (15) by turning square lug (14) clockwise for left side doors and counter clockwise for right side doors. Refer to figure 38b.
- 8. Remove female door guide (13). Refer to figure 38a. Retain fasteners for re-installation (see sect. KK.)

NOTE

Ensure lanyard clip is oriented in 6 o'clock position as shown in Fig. 38c

- 9. Close right front door assembly (8) and from inside vehicle, check gap around door to ensure no interference between door frame and return. Refer to figure 38b. If gap is not sufficient, support door assembly (8), loosen capscrews (9), adjust hinge (3) mounting position as required. Tighten ten capscrews (9) to 37 lb-ft (50.2 N·m).
- 10. Re-install female door guide. (See sect. KK.)
- 11. Install 6437172-01M1 door trim weather seal.

NOTE

If door trim weather seal interferes with upper A-pillar panel, modify panel as necessary per figure 38a.

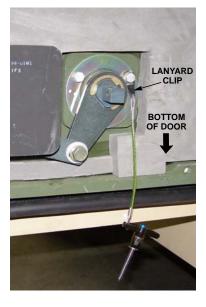


Figure 38c

- 12. Install front door check strap (6) with 4397000-044 capscrew (5) and 4397064-003 locknut (7) as shown in figure 38a. Tighten locknut (7) until three or four threads of capscrew (5) are extended through locknut (7).
- 13. Repeat steps DD.1. through DD.9. for left side, using 6435090-01M1 or 6435090-200M1 left front door assembly and 6435094-01M1 left side door hinge.
- EE. Install left and right side rear door assemblies as follows:

WARNING

Vehicle door is extremely heavy and must be supported during installation. Failure to do so may cause injury to personnel or damage to equipment.

CAUTION

To prevent damage to armored glass, protect all exposed glass surfaces during installation of door.

NOTE

Installation of left and right side rear door assemblies is basically the same. This procedure covers the right side.

- 1. Lift 6435264-01M1 or 6435264-200M1 right rear door assembly (6) using an appropriate hoist and M00626BAS00 1 hanger bracket door fixture. Refer to figure 39a.
- 2. Install two
 4397025-026
 dowel pins (7)
 through
 installed hinge
 (11) as shown in figure 39a.

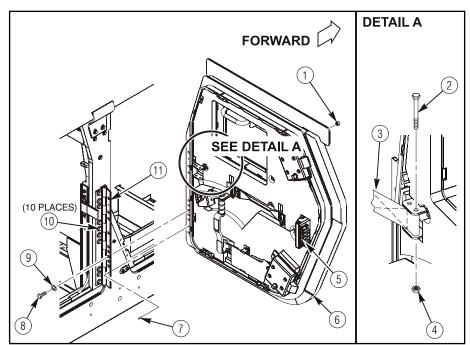


Figure 39a

- 3. Position right rear door assembly (6) against installed hinge (11) and align to dowel pins. Install ten 4397000-060 capscrews (8), 4397005-015 washers (9), and 4397064-005 locknuts (1) as shown in figure 39a. Tighten locknuts (1) to 37 lb-ft (50.2 N·m).
- 4. Remove hanger bracket door fixture from door.
- 5. With rear door assembly (8) open, use an adjustable wrench to lock out upper latch assembly (14) and lower latch assembly (13) by turning square lug (12)

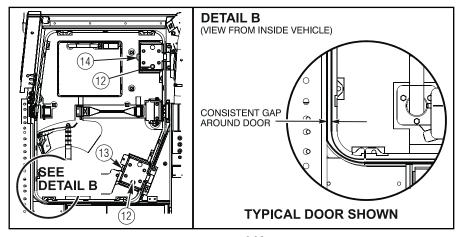


Figure 39b

clockwise for left side doors and counter clockwise for right side doors. Refer to figure 39b.

6. Remove female door guide (5). Refer to figure 39a. Retain fasteners for re-installation. (See sect. KK.)

NOTE
Ensure lanyard clip is oriented in 6 o'clock position as shown in Fig. 38c.

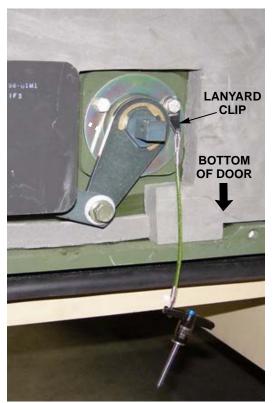


Figure 38c

- 7. Close right rear door assembly (6) and from inside vehicle, check for consistent gap around door. Refer to figure 39a. If gap is not consistent, support door assembly (6), loosen capscrews (10) and adjust hinge (11) mounting position as required. Tighten capscrews (10) to 37 lb-ft (50.2 N·m).
- 8. Re-install female door guide. (See Sect. KK.)
- 9. Install 6437172-01M1 door trim weather seal.
- 10. Install rear door strap (3) with 4397000-044 capscrew (2) and 4397064-003 locknut (4) as shown in figure 39a. Tighten locknut (4) until

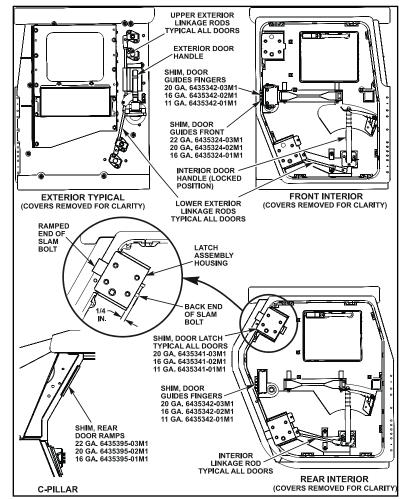


Figure 41

three or four threads of capscrew (2) are extended through locknut (4).

- 11. Repeat steps EE.1. through EE.7. for left side, using 6435095-01M1 or 6435095-200M1 left rear door assembly and 6435094-01M1 left side door hinge.
- FF. Baseline adjust exterior linkage rods as follows. Refer to figure 41.
 - 1. Remove two linkage covers from exterior of door and one linkage cover from interior of door. Retain fasteners for re-installation.
 - 2. Adjust bottom exterior linkage rod until slight inward movement is noticed in the ramped end of the bottom latch bolt, and there is minimal back and forth wiggle in the exterior handle.
 - 3. Adjust top exterior linkage rod until slight inward movement is noticed in the ramped end of the top latch bolt.
 - 4. When slight engagement pressure is applied to the exterior door handle, both exterior linkage rods should start to drive both latch mechanisms equally and simultaneously.

GG. Baseline adjust interior linkage rod. Refer to figure 41 (pg 45)...

- 1. Place interior door handle in the lock position.
- 2. Adjust interior linkage rod until there is minimal back and forth wiggle in the exterior door handle.

HH. Adjust ramped end of latch bolt assembly as follows. Refer to figure 41 (pg 45):

- 1. Adjust bottom exterior linkage rod until there is 3/16 to ¼ inch clearance between the end of the bottom latch bolt and the lower latch ramp.
- 2. Adjust top exterior linkage rod until there is 3/16 to ½ inch clearance between the end of the top latch bolt and the upper latch ramp.
- 3. Place interior door handle in the locked position and re-adjust interior linkage rod until there is minimal back and forth wiggle in the exterior door handle.
- II. Inspect door latching mechanism as follows. Refer to figure 41 (pg 45).
 - 1. Pull exterior door handle and release. The handle on a properly adjusted door should snap back to its original position.
 - 2. When slight engagement pressure is applied to the exterior door handle, both exterior linkage rods should start to drive both latch mechanisms equally and simultaneously.
 - 3. Linkage rod ends should be parallel with one another.
 - 4. With no engagement pressure on the handles, the linkage rods should be able to wiggle.
 - 5. Place interior door handle in lock position.
 - 6. Check exterior door handle for excessive back and forth wiggle. The handle on a properly adjusted door should have little or no wiggle.
 - 7. If door does not pass this inspection repeat the previous steps adjusting until corrected.

JJ. Adjust door latches as follows:

- 1. Unlock lower latch assembly (15) by turning square lug (14) counter clockwise for left side door and clockwise for right side doors. Refer to figure 38b.
- 2. With lower latch unlocked gently close door and check for a clean mate between lower latch assembly and latch ramp and that the latch is striking approximately the center of the latch ramp.
 - a. If latch is hitting the latch ramp to hard, loosen four bolts securing latch assembly to the door assembly and move latch assembly slightly away from latch ramp. Tighten four bolts to 7 lb-ft (9 N·m).
 - b. If latch is not hitting approximately in the center of the latch ramp, loosen four bolts securing latch assembly to the door assembly and adjust accordingly. Tighten four bolts to 7 lb-ft (9 N·m).

NOTE

Shim latch bodies only as a last resort. In lieu of shimming latch bodies, adjust ramp blocks whenever possible (see Sect. JJ-1.). When shimming latch bodies, do not use more than the equivalent of one thick shim. Excessive shimming may result in poor rescue wrench engagement.

- c. If latch is not fully engaging the latch ramp, loosen two outside bolts and remove the two inside bolts from the latch assembly and shim as required. Refer to figure 41 for shimming locations and shim sizes. Once required shim(s) have been added reinstall two inside bolts and tighten four bolts to 7 lb-ft (9 N·m).
- 3. Repeat steps JJ.1. and JJ.2. to adjust upper latch assembly.

JJ-1.If necessary, adjust ramp blocks as follows:

- 1. Adjustment tips for front ramp blocks:
 - a. Consider removing thick lower front ramp blocks and replacing with thinner upper ramp blocks (using a quantity which will be in total a shorter standoff). All shim kits have extra upper front ramp blocks.
 - b. Consider using no front upper ramp blocks. Slide bolt assemblies will not damage the thick RHA B-pillars.

2. Adjustment tips for rear ramp blocks:

- a. Lower rear ramp blocks may require re-drilling the locating holes in C-beam to achieve maximum adjustability (and/or additional modification to the cut-out in aluminum body).
- b. Upper rear ramp blocks are stationary. Adjustment may be achieved by shimming the shoulder pads outward. All shim kits have extra upper rear ramp shims. On severely tweaked, high mileage vehicles, loosening and repositioning C-pillar support tubes may be required.

KK. If necessary, modify vehicle doors as follows:

1. For front doors:

NOTE

Modification of door guide bracket and use of nut plates is required for adjusting female door guides

- a. Inspect front door guide bracket for presence of nut plate. If nut plate is already installed skip to step 2. If no nut plate is present, complete the following steps.
- b. Remove four flat socket head screws (4) and female door guide (3) from front door guide bracket (2) as shown in figure 42b.
- c. Enlarge four mounting holes in front door guide brackets (2) as shown in figure 42a.

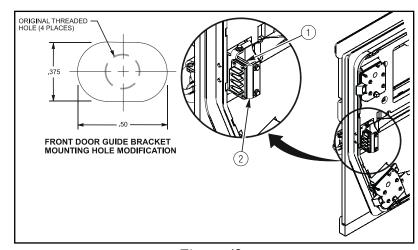


Figure 42a

- d. Apply 8030-01-025-1692 sealing compound to threads of four flat socket head screws (4). Refer to figure 42b.
- e. Install female door guide (3) on front door guide bracket (2) with four flat socket head screws (4) and 6435313-01M1 nut plate (1) as shown in figure 42b. Tighten four socket head screws (4) until just snug.

2. For rear doors:

- f. Remove four flat socket head screws (4), nut plate (1), and female door guide (3) as shown in figure 42b.
- g. Enlarge four mounting holes in rear door guide brackets (2) as shown in figure 42b.
- h. Apply 8030-01-025-1692 sealing compound to threads of four flat socket head screws (4). Refer to figure 42b.

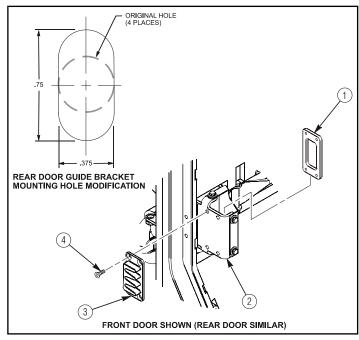


Figure 42b

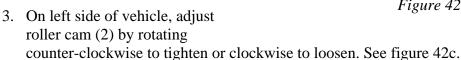
Install female door guide (3) on rear door guide bracket (2) with four flat socket head screws (4) and nut plate (1) as shown in figure 42b. Tighten four socket head screws (4) until just snug.

KK-1. Adjust windows as follows:

NOTE

The three window rollers on the AFT rail only of the window box are adjustable

- 1. Loosen screw (1) to allow roller cam (2) to be adjusted. See figure 42c.
- 2. On right side of vehicle, adjust roller cam (2) by rotating clockwise to tighten or counterclockwise to loosen. See figure 42c.



4. After correct window travel is achieved, tighten screw (1) to 25 lb-ft (18 N·m). See figure 42c.

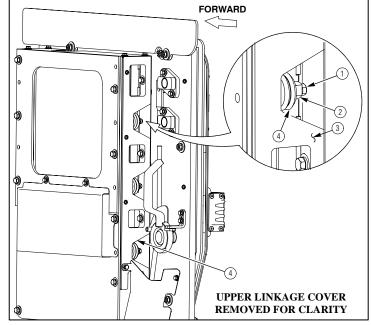


Figure 42c

LL. Adjust vehicle doors as follows:

1. Tighten or loosen four flat socket head screws as required to ensure that they are just snug. Refer to figure 43.

NOTE

Do not allow door guides to dictate position of door. Loosen or remove female door guide on door as required.

- 2. On front doors only, loosen two bolts securing door guide bracket to door assembly. Gently close door. With door closed, tighten two bolts securing the door guide bracket to the door assembly. Open door and tighten two bolts to 37 lb-ft (50.2 N·m).
- 3. For front or rear doors, gently close door and refer to figure 43 for proper fit of the male to female door guide mounts. Once proper fit is achieved tighten four bolts on the female door guides to 10 lb-ft (13.6 N·m).
- 4. Add or remove shims from under female door guides to obtain proper depth engagement. Refer to figure 43.

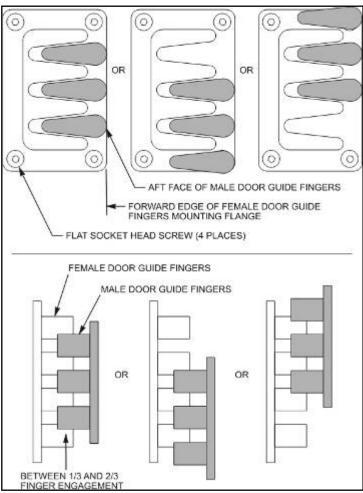


Figure 43

5. Make any other adjustments to vehicle doors by using shims from 6435695-01M1 and 6435696-01M1 shim kits and adjust linkage rods as required. Refer to figure 41 for possible adjustment locations.

- LL.1. After final door adjustments are made complete the following:
 - 1. Remove each of the four screws, securing each of the eight door guides (male and female), one screw at a time. Apply loctite 222 and re-install screw tightening to 10 lb-ft (13.56 N·m). Refer to figure 45
 - 2. Mark properly torqued screws with paint pen or indelible marker. Marking should be applied on both screw and door guide base so that any future backing out of screws can be easily identified.
 - 3. Inspect inward facing surface of door latch boxes for the presence of an "E" in a circle. The "E" marking represents a newer design.
 - 4. Remove each of the four screws, securing each of the eight latch boxes, one screw at a time. Refer to figure 46. Apply loctite 222 and re-install screw tightening to 6 lb-ft (8.13 N·m) on the older designed latch boxes or 10 lb-ft (13.56 N·m) on the newer (marked "E") boxes.
 - 5. Mark properly torqued screws with paint pen or indelible marker. Marking should be applied on both screw and latch box so that any future backing out of screws can be easily identified.

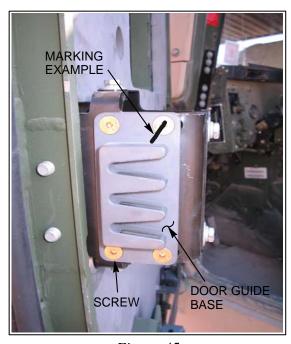


Figure 45



Figure 46

MM. Complete installation portion of procedure as follows:

- 1. Install A/C supply vents and screen. (Refer to TM 9-2320-387-24-2.)
- 2. Install right rear rifle support. (Refer to TM 9-2320-387-24-2.)
- 3. Install right front lower seat belt bracket in B-pillar. (Refer to TM 9-2320-387-24-2.)
- 4. Apply 8030-01-025-1692 sealing compound to threads of four existing capscrews (6), and install left front lower seat belt bracket (2) and seat belt protector plate (4) on B-pillar (3) with four existing capscrews

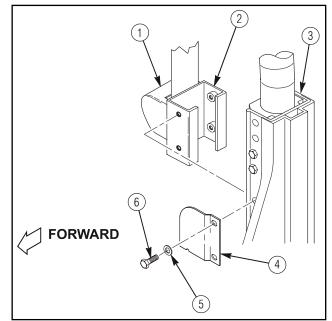
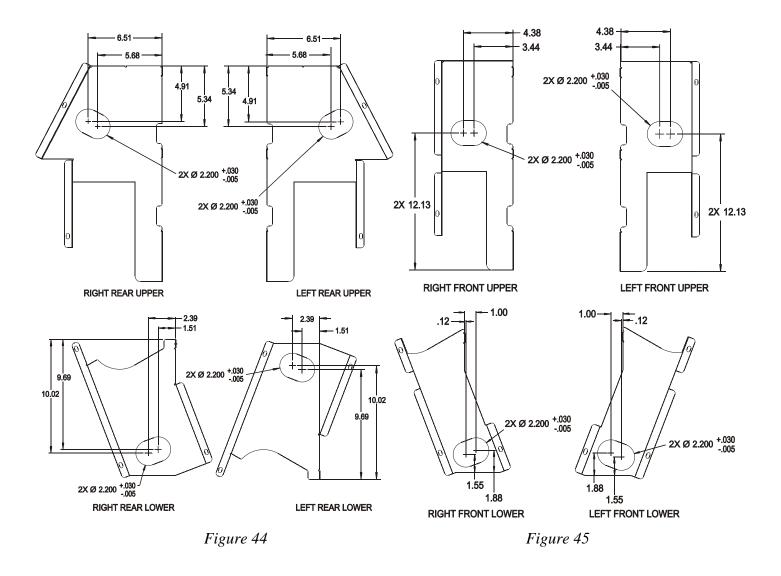


Figure 40

- pillar (3) with four existing capscrews (6) and washers (5) as shown in figure 40. Tighten capscrews (6) to 21 lb-ft (28.5 N·m).
- 5. Install access hole cover plate. (Refer to TM 9-2320-387-24-2.)
- 6. If necessary, enlarge two mounting holes to 3/16 inch diameter, and install fuel door catch with two 4397081-009 rivets. (Refer to TM 9-2320-387-24-2.)
- 7. Install fuel filler housing. (Refer to TM 9-2320-387-24-2.)
- 8. Install left and right side plates on cargo shells at C-pillar top armor. (Refer to TM 9-2320-387-24-2.)
- 9. Replace webbing retractor mounting brackets as instructed in Appendix A. Use one 4397001-073 capscrew and one 4397005-014 washer per side for rocker panel interface with rear brackets.
- 10. Install rear seat belt reinforcement in rear tunnel areas as instructed in Appendix B.
- 11. Install companion seat assembly. (Refer to TM 9-2320-387-10.)
- 12. Install left and right side passenger seats. (Refer to TM 9-2320-387-24-2.)
- 13. Install fire extinguisher. (Refer to TM 9-2320-387-10.)
- 14. If necessary, remove existing mirror brackets and install left and right side rearview mirrors. (Refer to TM 9-2320-387-24-2.



NN. To ensure clear wrench access to the square lugs on the latches, it may be necessary to open round holes into oblong holes. Cover may be modified as necessary using dimensions shown on figures 44 and 45.

PP. Apply 7930-01-380-9028 dry lubricant NSN 7930-01-380-9028 to all eight door guides and exterior door latches and at 3,000 mile service intervals, or as necessary.

PUBLICATIONS AFFECTED:

TM 9-2320 387-24-2, TM 9-2320-387-24P, and TM 9-2320-387-10.

LEVEL OF MAINTENANCE: Intermediate



Document No. E2006-29 Date: 18 september 2006

INSTRUCTIONS FOR THE REPLACEMENT OF THE

WEBBING RETRACTOR MOUNTING BRACKETS IN THE HMMWV M1114 VEHICLE FITTED WITH FRAG 5 DOORS

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No	
PREPARED BY: John Churilla, Program Engineer	9/18/06 Date
APPROVED BY: Charles E. Van Druff, Program Manager	<u>9/18/06</u> Date
APPROVED BY: E. Joseph Martin, Director of Operations	9/18/06 Date

Appendix A INDEX OF REVISIONS

New Revision	Revision Date	Change(s) Made
110 (151011	2 000	

SECTION I. INTRODUCTION

1-1. PURPOSE. THE PURPOSE OF THESE INSTRUCTIONS IS TO PROVIDE A PROCEDURE TO REPLACE THE WEBBING RETRACTOR MOUNTING BRACKETS WITH A UPGRADED VERSION IN THE HMMWV M1114 MODEL WITH FRAG 5 DOORS.

SECTION II. INSTALLATION KIT

2-1. NEW MATERIAL. INSTALLATION KIT 2006065-1 CONTAINS THE FOLLOWING:

PART NO.	NOMENCLATURE	QTY
2005170-5	BRACKET, FRONT	1
2005170-7	170-7 BRACKET, FRONT	
2006072-1	BRACKET, REAR	1
2006072-2	BRACKET REAR	1
BOLT, HEX HD, 7/16-20 X 3/4 IN LONG		8
	BOLT, HEX HD, 7 MM X 16 MM LONG	4
	WASHER, 1 IN OD X .45 ID X 1/8 THICK	4
	NUT, LOCK, 7/16-20	4
	NUT, 7 MM	4

NOTE

2-2. THE FOLLOWING ITEM IS REQUIRED, BUT IS NOT INCLUDED IN THE KIT:

PART NO. NOMENCLATURE QTY

LOCTITE 242 THREAD LOCKING ADHESIVE A/R

(OR EQUIVALENT)

2-3. EXISTING MATERIAL. ALL MATERIAL REMOVED AND NOT RE-USED DURING INSTALLATION WILL BE RETURNED TO STOCK FOR DISPOSITION IN ACCORDANCE WITH AR 725-50.

SECTION III. INSTALLATION PROCEDURES

- 3-1 GENERAL PREPARATION.
 - A. NO JACK OR HOIST IS REQUIRED.
 - B. NO ELECTRICAL POWER IS REQUIRED.
 - C. NO SPECIAL TOOLS, EQUIPMENT OR SKILLS ARE REQUIRED.
 - D. SOME DISASSEMBLY OF THE VEHICLE STRUCTURE IS REQUIRED.
- 3-2 SAFETY.
 - A. THE INSTALLATION INVOLVES NO FIRE, CHEMICAL, EXPLOSIVE OR ELECTRICAL HAZARDS.
 - B. NO HEAVY LIFTING IS INVOLVED.

- 3-3 VEHICLE PREPARATION.
 - A. APPLY VEHICLE PARKING BRAKE (REFER TO TM 9-2320-387-10).
 - B. REMOVE REAR PASSENGER SEAT AND FRONT COMMANDER SEAT (REFER TO TM 9-2320-387-24).
 - C. REMOVE REAR A/C COOLANT LINE COVER (REFER TO TM 9-2320-387-24)
- 3-4 EQUIPMENT PREPARATION. FOR EACH SEAT INSTALLATION, REFER TO THE APPROPRIATE INSTALLATION DIAGRAM AND LOCATE THE CORRECT BRACKET AND MOUNTING HARDWARE AS FOLLOWS:

SEAT POSITION					
FRONT	FRONT RIGHT	REAR	REAR		
LEFT		LEFT	RIGHT		
FIG. 1	FIG. 2	FIG. 3	FIG. 4		

- 3-5 DISASSEMBLY.
 - A. ON ALL SEATS REMOVE THE 7/16 HEX HEAD BOLT WHICH HOLDS THE MOUNTING BRACKET ON TO THE VEHICLE STRUCTURE. DISCARD THE BOLT AND WASHER.
 - B. REMOVE THE ANTI ROTATION BOLT AND NUT AND DISCARD THEM.
 - C. DISASSEMBLE THE 7/16 HEX HEAD BOLT AND LOCK NUT AND REMOVE THE WEBBING RETRACTOR FROM ITS MOUNTING BRACKET. DISCARD THE BRACKET. RETAIN THE WEBBING RETRACTOR. DISCARD THE BOLT AND NUT
- 3-6 INSTALLATION (REFER TO THE APPROPRIATE INSTALLATION DIAGRAM).

NOTE

APPLY THREAD LOCKING ADHESIVE. LOCTITE 242 OR EQUIVALENT TO BOLTS PRIOR TO INSTALLING INTO EXISTING NUT PLATES AND PLAIN NUTS. DO NOT APPLY THREAD LOCKING ADHESIVE WHERE LOCKNUTS ARE USED

A. INSTALL THE LAP STRAP RETRACTOR LOOSELY ON ITS MOUNTING BRACKET, USING THE 7/16 HEX HEAD BOLT AND NUT.

NOTE

TAKE CARE TO ENSURE THAT THE CORRECT BRACKET IS USED,
AND THAT IT IS CORRECTLY ORIENTED. THE REAR SEAT
RIGHT HAND BRACKET IS A MIRROR IMAGE OF THE REAR LEFT HAND
BRACKET. IN BOTH CASES THE "UP" ARROW
MUST POINT UPWARD. THE FRONT RIGHT HAND
BRACKET IS A MIRROR IMAGE OF THE FRONT LEFT HAND BRACKET.

NOTE

ENSURE THAT THE RETRACTOR IS REPLACED ON THE SEAT FROM WHICH IT WAS REMOVED (RED OR BLUE DOT AS INDICATED).

- B. ENSURE THAT THE RETRACTOR IS CORRECTLY ORIENTED WITH THE COLORED DOT (RED OR BLUE AS APPROPRIATE) TOWARDS THE TOP.
- C. INSTALL THE ANTI-ROTATION BOLT AND NUT.

NOTE THE ANTI-ROTATION BOLT AND NUT ARE METRIC SIZE (7mm).

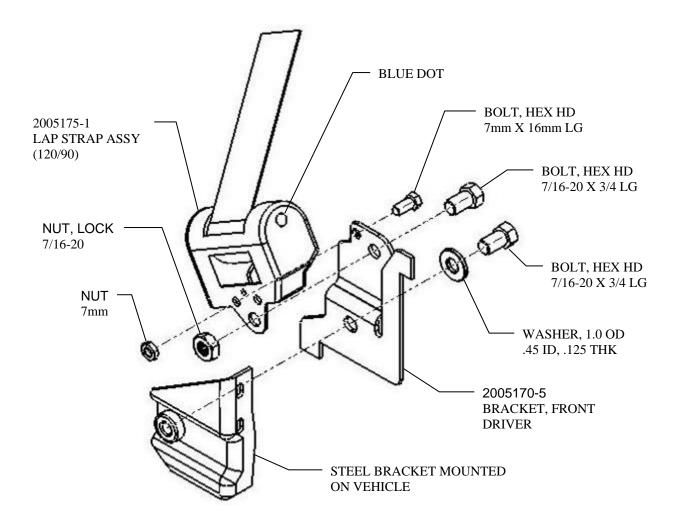
- D. TORQUE THE 7/16 BOLT TO 40 ± -5 FT-LB. TORQUE THE ANTI-ROTATION BOLT TO 12 ± -1 FT-LB (144 ± -10 IN-LB)
- E. INSTALL THE BRACKET ON THE EXISTING NUT PLATE USING THE 7/16 HEX HEAD BOLT AND 1-INCH WASHER. INSTALL THE BOLT LOOSELY SO THAT THE BRACKET IS FREE TO MOVE ABOUT THE BOLT WITHIN THE CONFINES OF THE RECTANGULAR MOUNTING HOLE, UNTIL THE BRACKET SEATS FIRMLY AGAINST THE VEHICLE WALL AND THE ANCHOR NUT ON THE BRACKET ALIGNS WITH THE CORRESPONDING 3/8-24 BOLT FROM THE FRAG 5 ARMOR PANEL
- F. INSTALL THE 3/8-24 BOLT INTO THE ANCHOR NUT ON THE RETRACTOR MOUNTING BRACKET.
- G. WHILE HOLDING THE BRACKET FIRMLY AGAINST THE VEHICLE WALL TORQUE THE 7/16 BOLT TO 40 +/-5 FT-LB.
- H. TORQUE THE 3/8 BOLT TO 25 +/-5 FT-LB

3-7 WEBBING RETRACTOR FUNCTIONAL CHECK

- A. PULL SLOWLY ON THE WEBBING TO VERIFY THAT IT EXTENDS AND RETRACTS FULLY AND FREELY.
- B. WITHDRAW APPROXIMATELY 8 INCHES OF STRAP FROM THE RETRACTOR. JERK ON THE STRAP TO CAUSE THE REEL TO LOCK.
- C. ALLOW THE WEBBING TO RETRACT SLOWLY, AND VERIFY THAT IT IS WITHDRAWN FULLY INTO THE RETRACTOR.

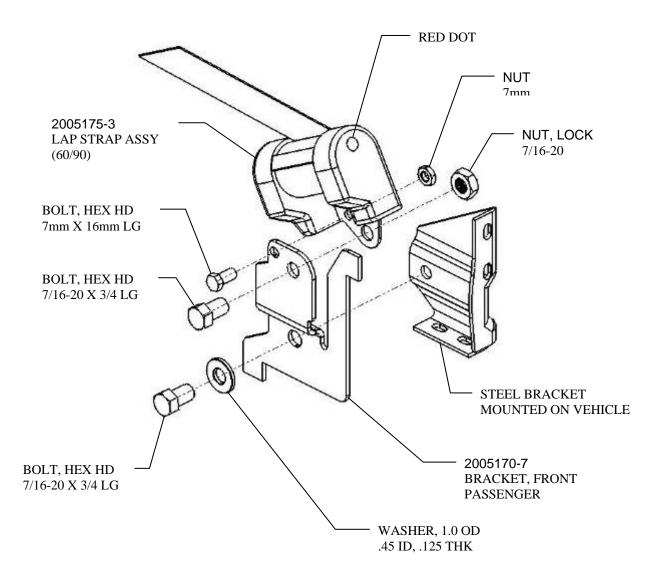
NOTE

SEATBELT RETRACTORS MAY BE LOCKED NOT ALLOWING THE WEBBING TO EXTEND UPON INITIAL USE. THIS CAN BE CAUSED IF THE STRAP IS ALLOWED TO RETRACT SUDDENLY OR IF THE RETRACTOR WAS JOSTLED DURING SHIPPING AND INSTALLATION. IT IS POSSIBLE FOR THE RETRACTOR TO LOCK WITH THE WEBBING FULLY RETRACTED, IN WHICH CASE IT MAY NOT AUTOMATICALLY UNLOCK. IF THIS IS THE CASE, THE RETRACTOR'S AUTO-LOCKING MECHANISM NEEDS TO BE RE-SET. TO DO THIS, PULL ON THE STRAP (A FORCEFUL PULL MAY BE REQUIRED) IN ORDER TO PACK THE WEBBING AND ALLOW THE STRAP TO EXTEND AN INCH OR SO. THEN ALLOW THE STRAP TO RETRACT SLOWLY, AND THE RETRACTOR WILL UNLOCK. THE REEL WILL NOT FUNCTION IF IT IS NOT PROPERLY INSTALLED. IF THE REEL DOES NOT FUNCTION PROPERLY, REVIEW AND VERIFY THE INSTALLATION PROCEDURES.



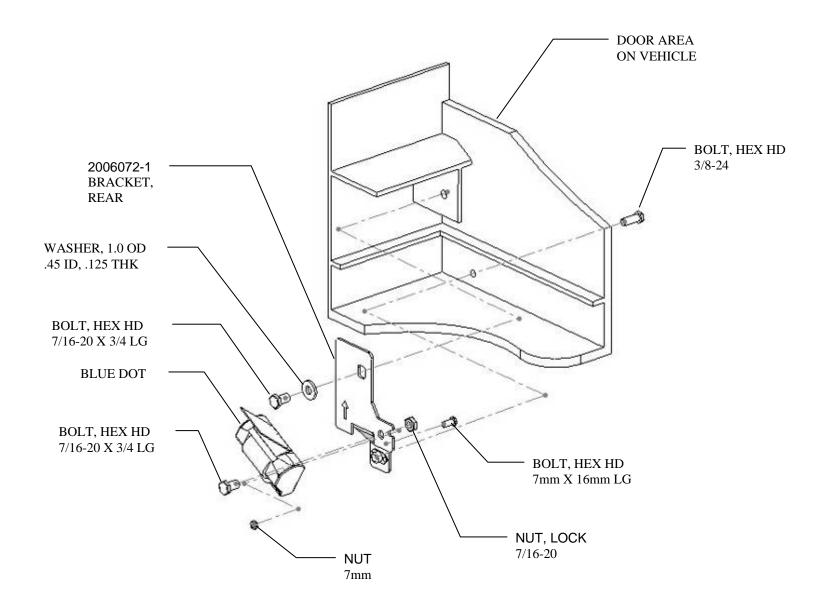
LEFT FRONT LAP STRAP ASSEMBLY

FIGURE 1



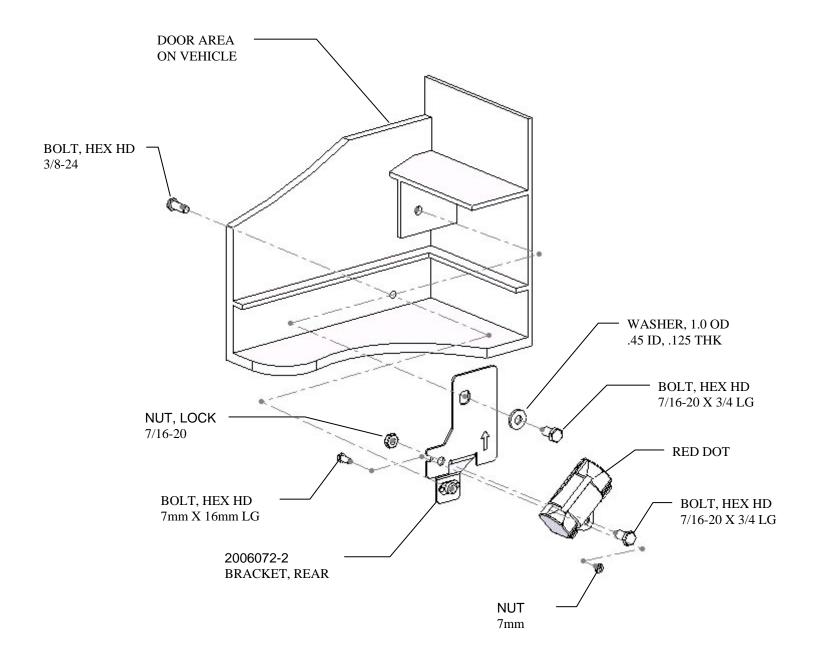
RIGHT FRONT LAP STRAP ASSEMBLY

FIGURE 2

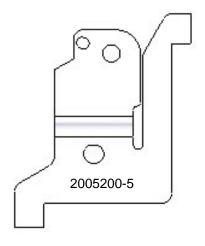


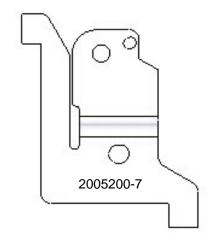
LEFT REAR LAP STRAP ASSEMBLY

FIGURE 3



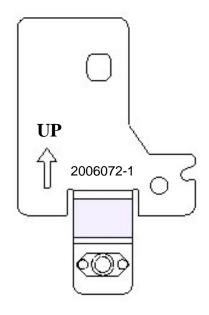
RIGHT REAR LAP STRAP ASSEMBLY FIGURE 4

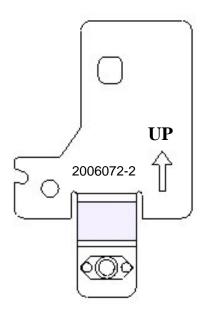




BRACKET, FRONT, DRIVER

BRACKET, FRONT, PASSENGER





BRACKET, REAR, DRIVER

BRACKET, REAR, PASSENGER

BRACKETS

FIGURE 5

Appendix B

Appendix B

MODEL: M1114 w/Koch seat belt brackets for Frag #5 kit

SUBJECT: Rear Seatbelt Reinforcement in M1114 Rear Body Tunnel Areas

DEFICIENCY: The current M1114 rear seat belt anchorages in the tunnel areas are unable to meet the FMVSS 210 requirements when the Frag #5 Koch seat belt brackets are installed.

COMMENTS: This article will provide the user in the field with a list of materials needed and installation instructions for the reinforcements that have been proven to pass the FMVSS 210 when installed.

MATERIALS/PARTS:

NSN/PART NO.	NOMENCLATURE	QTY
57K4750	Kit, Tunnel Reinforcement, Rear Seat	1
Consisting of:		
6500866	Reinforcement, Rear Seatbelt	
CR3213-6-03	CHERRYMAX Rivet	14
CR3213-6-05	CHERRYMAX Rivet	4
The following material	l is required but not included in kit 57K4750	
DEPEND 330	LOCTITE Cold Adhesive	1

PROCEDURE:

- A. Vehicle Preparation
 - Remove the rear seats, seatbelt anchorage bolts and the insulation covers on the tunnel sides.
 - 2. Clean the tunnel seatbelt anchorage areas. Heavy grease, oil, and dirt have to be wiped away.
- B. Apply DEPEND 330 and Secure the 6500866 Reinforcement (1)
 - Hold DEPEND can 1-2 inches from the tunnel side panel and spray Activator on the surface that is larger than the patch area.
 - 2. Apply Adhesive to the reinforcement (1) facing the tunnel side.
 - 3. Use the anchorage bolt with washers with flat washer plate to mount the reinforcement onto the tunnel side as shown in figure 1. Center the 0.593"Ø hole in the reinforcement (1) to the seatbelt bolt hole and adjust the top edge of the reinforcement parallel to the tunnel top edge as much as possible. Tighten the bolt.

CAUTION

PRIOR TO DRILLING, A LOCALLY MANUFACTURED COLLAR MADE OF STEEL TUBING OR EQUIVALENT MATERIAL, THAT SLIPS OVER THE DRILL BIT MUST BE USED WHEN DRILLING THESE HOLES. THE DRILL BIT LENGTH OUTSIDE OF THE COLLAR MUST BE LESS THAN 0.5 INCH. FAILURE TO DO SO MAY RESULT IN DAMAGE TO THE FUEL TANK AND DAMAGE TO THE A/C LINES AS SHOWN IN FIGURE 2.

- 4. Use the nine holes (0.192/0.196Ø) in reinforcement (1) as templates. Drill 3 holes marked "B" in Figure 1 through the tunnel side panel, using a drill size of 10 (0.193Ø).
- 5. Install three CR3213-6-03 rivets in the holes marked B.

CAUTION

PRIOR TO DRILLING, A LOCALLY MANUFACTURED COLLAR MADE OF STEEL TUBING OR EQUIVALENT MATERIAL, THAT SLIPS OVER THE DRILL BIT MUST BE

USED WHEN DRILLING THESE HOLES. THE DRILL BIT LENGTH OUTSIDE OF THE COLLAR MUST BE LESS THAN 0.5 INCH. FAILURE TO DO SO MAY RESULT IN DAMAGE TO THE FUEL TANK AND DAMAGE TO THE A/C LINES AS SHOWN IN FIGURE 2.

- 5. Drill the rest of holes through the tunnel side panel.
- 6. Install two CR3213-6-05 rivets in the holes marked "A" in Figure 1.
- 7. Install CR3213-6-03 rivets in the remaining holes.
- 8. Unscrew the bolt.
- 9. Repeat B, C.1 and C.2 on the other side of the tunnel.

CAUTION

REPLACE ZIP TIES TO A/C LINES PRIOR TO RE-INSTALLING A/C LINES COVERS. FAILURE TO DO SO MAY RESULT IN DAMAGE TO VEHICLE A/C SYSTEM.

LEVEL OF MAINTENANCE: Unit

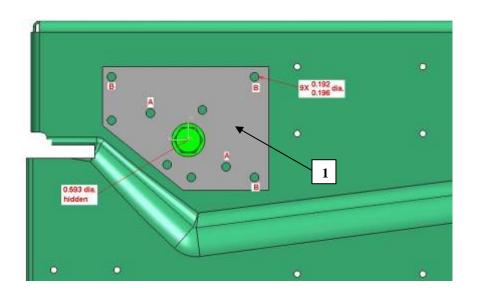


Figure 1



Figure 2a Figure 2b



Figure 2c

Appendix C

Appendix C

Listing of **TECHNICAL MANUAL REFERENCES** used in this digest article:

REFERENCE IN THIS DOCUMENT ON PAGE	TECHNICAL MANUAL REFERENCED FROM	TECHNICAL MANUAL PARAGAPH AND HEADING
6	TM 9-2320-387-10	2-14. STOPPING THE VEHICLE AND ENGINE
7	TM 9-2320-387-10	2-17. COMPANION SEAT ASSEMBLY AND BATTERY BOX COVER REPLACEMENT
7	TM 9-2320-387-24-1	4-68. BATTERY CABLE MAINTENANCE
7	TM 9-2320-387-24-2	10-68. REARVIEW MIRROR MAINTENANCE
8	TM 9-2320-387-24-2	10-69. DRIVER'S REARVIEW MIRROR BRACKET MAINTENANCE
8	TM 9-2320-387-10	2-29. FIRE EXTINQUISHER OPERATION
8	TM 9-2320-387-24-2	10-45. PASSENGER SEAT REPLACEMENT
8	TM 9-2320-387-10	2-16. ADJUSTING DRIVER'S SEAT
8	TM 9-2320-387-24-2	11-2. FRONT DOOR AND HINGE REPLACEMENT
8	TM 9-2320-387-24-2	11-2.1. REAR DOOR AND HINGE REPLACEMENT
8	TM 9-2320-387-24-2	11-12. DOOR STRIKER REPLACEMENT
8	TM 9-2320-387-24-2	25-6. WINDSHIELD MAINTENANCE
8	TM 9-2320-387-24-2	11-45. C-PILLAR TOP ARMOR MAINTENANCE
8	TM 9-2320-387-24-2	10-2. FUEL FILLER HOUSING MAINTENANCE
9	TM 9-2320-387-24-2	10-4. FUEL DOOR CATCH REPLACEMENT
9	TM 9-2320-387-24-2	11-12.1. RIGHT REAR DOOR STRIKER REINFORCEMENT REPLACEMENT
9	TM 9-2320-387-24-2	25-36. ACCESS HOLE COVER PLATE MAINTENANCE
9	TM 9-2320-387-24-2	25-32. A/C COOLANT LINE COVERS MAINTENANCE
9	TM 9-2320-387-24-2	25-13.7 LEFT REAR DOOR STRIKER REINFORCEMENT REPLACEMENT
9	TM 9-2320-387-24-2	11-85. CONDENSER FAN EXHAUST AND SUPPLY VENT MAINTENANCE
12	TM 9-2320-387-24-2	11-44. B-PILLAR ARMOR REPLACEMENT
12	TM 9-2320-387-24-2	11-46. THREE POINT SEATBELT BRACKETS REPLACEMENT
14	TM 9-2320-387-24-2	11-66. RIFLE SUPPORT MAINTENANCE
49	TM 9-2320-387-24-2	11-85. CONDENSER FAN EXHAUST AND SUPPLY VENT MAINTENANCE
50	TM 9-2320-387-24-2	11-66. RIFLE SUPPORT MAINTENANCE
50	TM 9-2320-387-24-2	11-46. THREE POINT SEATBELT BRACKETS REPLACEMENT
50	TM 9-2320-387-24-2	25-36. ACCESS HOLE COVER PLATE MAINTENANCE
50	TM 9-2320-387-24-2	10-4. FUEL DOOR CATCH REPLACEMENT
50	TM 9-2320-387-24-2	10-2. FUEL FILLER HOUSING MAINTENANCE
50	TM 9-2320-387-24-2	11-45. C-PILLAR TOP ARMOR MAINTENANCE
50	TM 9-2320-387-10	2-17. COMPANION SEAT ASSEMBLY AND BATTERY BOX COVER REPLACEMENT
50	TM 9-2320-387-24-2	10-45. PASSENGER SEAT REPLACEMENT
50	TM 9-2320-387-10	2-29. FIRE EXTINQUISHER OPERATION
50	TM 9-2320-387-24-2	10-68. REARVIEW MIRROR MAINTENANCE

Appendix D

Appendix D

HMMWV (M1114) EMERGENCY RESCUE WRENCH OPERATION INSTRUCTIONS

Operation of Emergency Recue Wrench for M1114.

WARNING

EMERGENCY RESCUE WRENCH IS FOR REMOVAL OF COMBAT LOCK MOUNTING CAPSCREWS IN AN EMERGENCY SITUATION. DO NOT USE WRENCH TO INSTALL ANY CAPSCREWS OR FOR ANY OTHER PURPOSE.

1) Detach Velcro strap to remove Emergency Rescue Wrench from stowage location. Refer to figure 1.



Figure 1

2) Inspect distressed vehicle to determine which type of door that vehicle has. A Single Movement Combat Lock door uses the ½ inch hex end of the Emergency Rescue Wrench. A Frag Kit 5 door uses the 5/8 eight point end of the Emergency Rescue Wrench. Refer to figures 2 and 3.





Figure 2

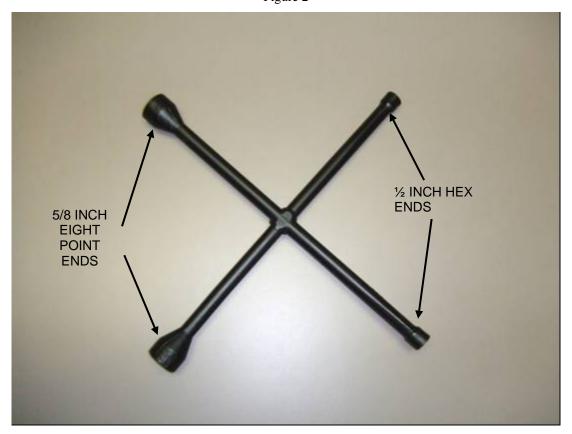


Figure 3

3) For Single Movement Combat Lock doors only:

- a) Identify door that allows for most immediate access.
- b) Locate two groups of three capscrews on door. Refer to figure 4

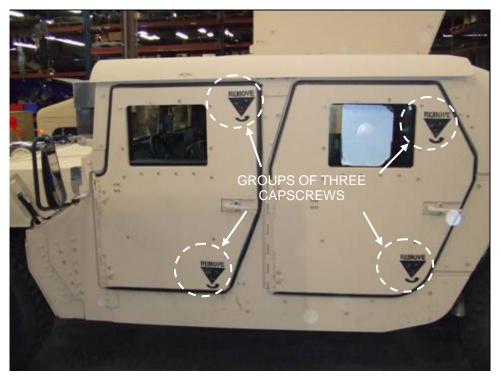


Figure 4

- c) Note that one capscrew in each group protrudes from door overlay. Refer to figures 5.
- d) Remove one group of three capscrews, beginning with recessed capscrews. Using the ½ inch hex ends, rotate Emergency Rescue Wrench counter clockwise. Refer to figure 5.

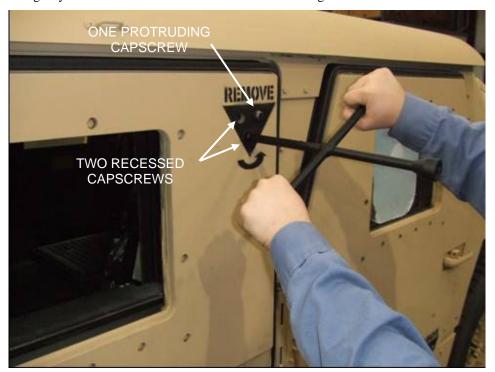


Figure 5

e) Remove second group of three capscrews, beginning with recessed capscrews.

f) Pull open door.

4) For Frag Kit 5 doors only:

- a) Identify door that allows for most immediate access.
- b) Locate two external door latch engagement lugs in opening Refer to figure 6.

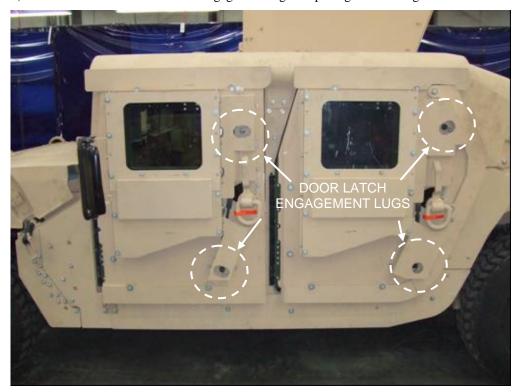


Figure 6

c) Using the 5/8 eight point ends of the Emergency Rescue Wrench, rotate door latch lugs **counter-clockwise on the left side of vehicle or clockwise on the right side** of vehicle to disengage the door latches. Refer to figure 7.

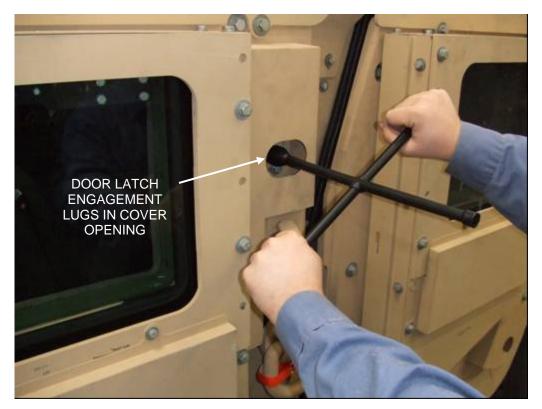


Figure 7

- d) Pull open door.
- 5) Return Emergency Rescue Wrench to vehicle stowage location securing with Velcro strap. Refer to figure 1.